

Missouri Department of Conservation

Strategic Guidance for Northern Bobwhite Recovery 2008 Report



Dear Conservation Partner,

The Missouri Department of Conservation is over halfway through our ten year plan to restore habitat for northern bobwhite – the Strategic Guidance for Northern Bobwhite Recovery. This initiative began in 2003 and continues to gather support and interest at the national, state and local level. The timing is still right to restore habitat for northern bobwhite and the opportunities have never been better.

This past year, the Missouri Department of Conservation, conservation partners and private landowners made noteworthy accomplishments for quail. Missouri continues to be a national leader for northern bobwhite recovery. In 2008, Scott County was recognized as the first county in the nation to reach Northern Bobwhite Conservation Initiative habitat goals. Cass County was soon to follow as the second county in the nation. Other Missouri counties are close to their habitat goals as well.

Equally important are the many individual landowner success stories we have heard the past few years and habitat improvements on public lands throughout Missouri. These success stories were made possible by dedicated landowners, devoted staff and energetic conservation partners.

Much work still remains on both private and public lands for bobwhite quail to attain landscape scale habitat and population goals. Regardless, steps taken today by the Department, conservation partners and private landowners to improve habitat will help ensure that bobwhites will be in Missouri for future generations to enjoy.

I hope you are encouraged by the progress Missourians have made for bobwhites and other wildlife. This report illustrates the actions we have taken to improve quail and grassland bird habitat in Missouri. A sincere thank you for your interest and dedication to quail and grassland bird conservation.

Sincerely,

John Hoskins
Director

Missouri Department of Conservation Strategic Guidance for Northern Bobwhite Recovery Annual Report

Contents	Page Number
Introduction	2
Northern Bobwhite Conservation Initiative Update	3
Public Land Accomplishments	5
Quail Emphasis Areas	7
Private Land Achievements	9
Private Land Quail Focus Areas	11
Farm Bill Programs	12
Habitat Management for Greater Prairie Chicken Recovery	
Directly Benefits Northern Bobwhite	14
Department Training	15
Research and Monitoring	17
Reaching out to Missourians	18
Marketing and Outreach	23
Regional Highlights	26
Central Region	26
Kansas City Region	30
Northeast Region	33
Northwest Region	38
Ozark Region	46
Saint Louis Region	48
Southeast Region	49
Southwest Region	53

INTRODUCTION

In May 2003, Director John Hoskins signed the Strategic Guidance for Northern Bobwhite Recovery for the restoration and enhancement of quail populations in Missouri. The goal of the plan is to reverse the downward trend in bobwhite abundance and bobwhite-related recreation in Missouri. The statewide plan identified four primary goals and was further supported by development of regional quail plans. The four statewide goals are:



- 🦋 Improve statewide bobwhite population
- 🦋 Improve bobwhite populations statewide on conservation areas
- 🦋 Expand interest among Missourians in seeing and hearing bobwhite
- 🦋 Increase statewide recreation related to bobwhite and associated species

While northern bobwhites are the primary focus, the recovery plan will benefit numerous wildlife species, reduce soil and water erosion, improve water quality, and provide greater outdoor recreational opportunities for Missourians. Likewise, other Department initiatives such as the Greater Prairie Chicken Recovery Plan, Comprehensive Wildlife Strategy and Conservation Opportunity Areas are helping restore quail habitat on private and public lands. The Strategic Guidance for Northern Bobwhite Recovery will also help the Department achieve several goals identified within the **Department's** strategic plan – The Next Generation of Conservation:

- 🦋 Conserving Plants, Animals and Their Habitats
- 🦋 Protecting Clean and Healthy Waters
- 🦋 Promoting Healthy Trees and Forests
- 🦋 **Preserving Missouri's Outdoor Recreation Heritage**
- 🦋 Teaching Missourians About Fish, Forest and Wildlife Resources
- 🦋 Helping Private Landowners Advance Conservation
- 🦋 Serving Nature and You on Conservation Areas

The Next Generation of Conservation is the **Department's** strategic, long-term plan that was developed with stakeholder input from private landowners, farmers, conservation organizations, and rural and urban leaders. The plan will help guide how the Missouri Department of Conservation provides public services to all Missourians to benefit fish, forest and wildlife in future years. The Strategic Guidance for Northern Bobwhite Recovery is an essential part of this long-term plan.



NORTHERN BOBWHITE CONSERVATION INITIATIVE UPDATE

Missouri's efforts to increase northern bobwhite numbers and other wildlife species with similar habitat needs are a part of a national initiative. The Northern Bobwhite Conservation Initiative (NBCI) was organized to develop population and habitat objectives in each of the 15 Bird Conservation Regions where northern bobwhite occur. The NBCI is a coordinated and cooperative approach for integrating the needs of quail into other bird management plans such as Partners in Flight and the North America Bird Conservation Initiative.



In April 2008, the Missouri Quail and Grassland Bird Council recognized Scott County partners for achievements made for northern bobwhite and for receiving the 2008 NBCI Group Achievement Award from Quail Unlimited.

The NBCI was designed by the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) and the Southeast Quail Study Group Technical Committee to restore declining quail populations to 1980 levels. After six years as a regional initiative, the NBCI has become a strong nationwide conservation effort involving numerous agencies and organizations. In 2007, the SEAFWA began a search for a permanent home for the NBCI, and in early 2008 an agreement was signed between the SEAFWA and University of Tennessee to move the NBCI to Knoxville. As part of the administrative change, the NBCI will grow into a national initiative that will cover the entire northern bobwhite range. These two administrative changes will provide greater stability for the program and additional opportunities for growth and development.

The past year was a significant year for quail habitat restoration efforts in Missouri. In early 2008, Scott County was recognized as the first county in the nation to achieve its NBCI habitat goal by creating over 7,000 acres of quail friendly habitat in an intensively row cropped landscape. Scott County farmers, quail hunters and citizens are noticing more quail in areas where field borders have been established. For their efforts, the Scott County Farm Service Agency, Natural



Resource Conservation Service, Soil and Water Conservation District and Missouri Department of Conservation staffs received the NBCI Group Achievement award for assisting private landowners with quail habitat restoration efforts. In 2007, the Missouri Department of Conservation received the NBCI Group Achievement Award for the **Department's effort toward** implementation of the NBCI plan and other accomplishments related to Farm Bill programs.



Edge feathering is better known as “Chop and Drop” in Cass County.

In September 2008, a second Missouri county was recognized for achieving goals identified in the NBCI. Over the past six years, landowners in Cass County have created over 15,000 acres of quail friendly habitat on agricultural lands by establishing native grass field borders, converting cool-season grass fields to native warm-season grasses and completing miles of edge feathering and shrub plantings. In addition, landowners are actively managing CRP grasslands and other early successional habitats with prescribed fire, light disking and herbicide treatments. **Cass County's success** would not have been possible if it were not for dedicated Department staff, enthusiastic landowners, assistance from Quail Unlimited and support from the Cass County Soil and Water Conservation District, Farm Service Agency and Natural Resource Conservation Service.

“In the 1980's my farm harbored ten coveys, but then over the years of stagnant habitat management it declined to just two, now since I have begun to work on intensive habitat management and disturbance I have noticed eight coveys again this fall.”

Tom Lampe, Cass County landowner

Other Missouri counties are approaching habitat goals identified in the NBCI. Carroll, Caldwell, Mississippi, Pemiscot, Dunklin, and New Madrid Counties are close to their habitat goals because of devoted landowners, MDC staff and conservation partners working to restore quail and grassland bird habitat.



Landowners in Mississippi, Pemiscot, Dunklin and New Madrid Counties have established miles of native grass field borders in this row crop dominated landscape through conservation programs such as CP-33 and the Conservation Security Program. Already, landowners and biologists are reporting more quail and pheasants along newly established native grass field borders and other wildlife friendly practices.

In Carroll and Caldwell counties, Department staff have been working closely with USDA staff to encourage mid-contract management (prescribed burning, light disking and herbicide treatments) on existing CRP grass fields. Landowners are also edge feathering, planting covey headquarters, spraying invasive plants and planting food plots to improve CRP grasslands and early successional habitats for bobwhite quail. Department biologists feel low growing woody cover is a critical habitat component missing from most of Missouri. Over the past few years, several miles of edge feathering have been completed in Carroll and Caldwell counties. Farmers are also enrolling crop field borders into the popular CP-33 and CP-38 programs. In parts of Carroll and Caldwell counties where habitat improvements have occurred landowners are seeing and hearing more quail.

PUBLIC LAND ACCOMPLISHMENTS

As a part of the Strategic Guidance for Northern Bobwhite Recovery, the Department is working to improve quail and grassland bird habitat on conservation areas throughout the state. Each year, quail and grassland bird projects receive high priority for funding during **the Department's annual budget** development. In fiscal year 2008, which runs from July 2007 to June 2008, Department work teams accomplished over 96,000 acres of quail friendly habitat on public land. Most of the work was completed in old fields, grasslands, prairies, savannas, glades and woodlands. Altogether, a total of 193,300 acres of habitat work and area management on conservation areas in fiscal year 2008.

Department staff also work with about 360 permittee farmers by renting approximately 68,000 acres of cropland, hay land and grassland on conservation areas. Permittee farmers are also helping the Department by establishing food plots, light disking and conducting other habitat management practices as a part of their farming contract with the Department.



Department staff are using a variety of management practices to improve habitat conditions on conservation areas. For example, prescribed fire and strip disking are being used to open bare ground and promote seed producing plants for brooding habitat. In recent years, work teams have been conducting prescribed burns almost year round, with an emphasis on summer and fall prescribed burns to improve future brooding habitat for northern bobwhite. Fall and winter are preferred times to conduct light disking in old fields and rank grass fields.



Biologists use light disking to improve brooding cover for bobwhite quail.

Biologists are also using managed grazing to improve brooding cover for quail and grassland birds on some conservation areas. Work teams are planting food plots and overseeding native wildflowers and legumes in warm-season grass fields to create even more brood cover for quail. We are enhancing woody and shrubby cover by creating brush piles, edge feathering and planting shrubs. Since 2005, the Department has completed a total of 467 miles of edge development and enhancement on conservation areas. This would be almost the same distance as driving back and forth on I-70 from Kansas City to Saint Louis!

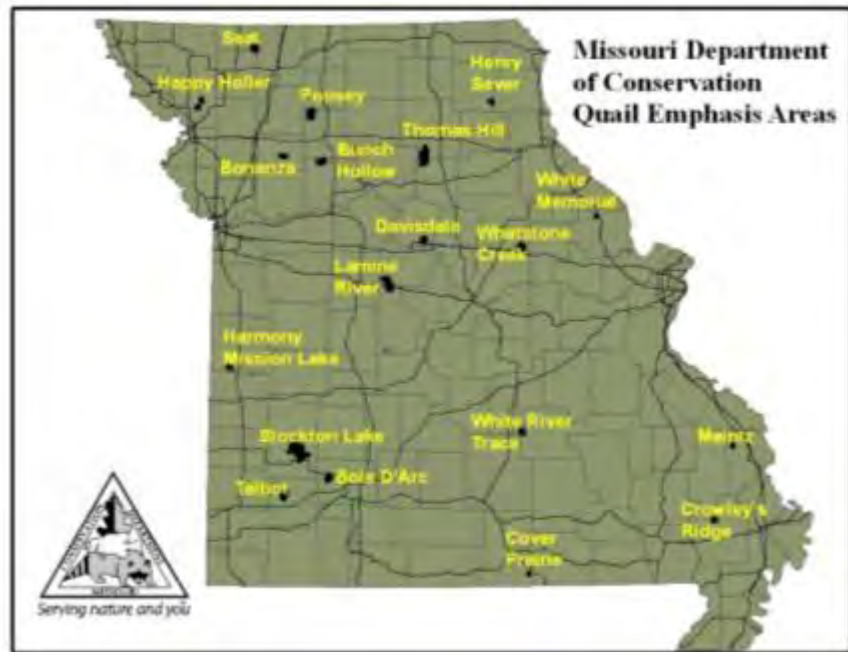


Conservation contractors are used to complete various habitat projects on conservation areas and private land, including edge feathering, as shown here.

In addition to Department efforts, the United States Forest Service (USFS) is also working to restore habitat for upland wildlife species including northern bobwhite. Through a cooperative agreement with the USFS, Department of Conservation and National Wild Turkey Federation 40 acres of old fields dominated by fescue and undesirable trees were converted to native warm-season grasses in the Houston/Rolla/Cedar Creek District. Staff also completed 312 acres of glade and savanna improvement by thinning cedars and undesirable hardwoods. In the Ava District, staff removed about 120 acres of cedar from glades and open woodlands. In the future, the sites will be included in prescribed burns aimed at restoring these natural communities.

QUAIL EMPHASIS AREAS

Nineteen conservation areas have also been identified as Quail Emphasis Areas (see map). Quail Emphasis Areas total 67,000 acres and are located in each region. The purpose of areas with these designations is to demonstrate good quail habitat management and to provide a quality quail hunting experience. Quail Emphasis Areas were selected based on existing habitat qualities, public demand, and size of the area. To learn more about Quail Emphasis Areas visit mdc.mo.gov/hunt/gamebird/gea.htm.



In fiscal year 2008, staff completed at least 12,000 acres of habitat work on these nineteen conservation areas. These areas are intensively managed with prescribed burning, light disking, food plots, natural community restoration, woody cover enhancement and invasive plant control. Last year, over 1,800 acres of invasive vegetation such as tall fescue, smooth brome and sericea lespedeza were sprayed with herbicides to control these invasive plants and to improve brooding cover for quail. Invasive plants often grow too thick for bobwhite quail to move through, and suppress desirable native grasses and legumes.

In 2008, the Department received conservation grants from SportsDOG Brand and the National Wild Turkey Federation Superfund to purchase herbicides to control invasive cool-season grasses on Quail Emphasis Areas. With the grants, Department staff were able to purchase six, 30 gallon containers of glyphosate that will be used in 2008 and 2009 to treat approximately 600 acres of habitat. Several Quail Emphasis Areas also received grants from the Conservation Heritage Foundation for small habitat projects such as woodland restoration, invasive plant control, native grass and wildflower seed and contracted edge feathering. Conservation grants play a critical role in enhancing district work team budgets each year. Staff have also spent considerable



Matt Tucker, resource assistant, spraying fescue at the Maintz Wildlife Preserve, a Quail Emphasis Area. A major goal on Quail Emphasis Areas is to significantly reduce tall fescue and smooth brome abundance.

time improving low growing woody cover on these areas by edge feathering, planting shrubs, constructing brush piles and thinning out undesirable trees in woodlands and old fields. Low growing woody cover is an essential habitat component for northern bobwhite that is used year round. In fact, biologists recommend 20 percent of **a covey's home range** should be in low growing woody cover or two acres for every ten acres of habitat. In 2008, biologists completed about 54 miles of woody edge enhancement and development on Quail Emphasis Areas.

In recent years, the Department has increased natural community restoration efforts on many conservation areas. Wildlife and Forestry Divisions are working together to restore natural communities such as woodlands, savannas and glades. Restoration often involves removing woody vegetation, controlling invasive species and reintroducing prescribed fire. On Quail Emphasis Areas, over 11,000 acres of woodland (pictured to the right) have been identified for restoration. For example,



Wildlife and Forestry staff at Whetstone Creek Conservation Area are currently marking several hundred acres of woodland for future thinning projects. Eventually, these restored habitats will become high quality upland game habitat for quail, wild turkey and other species.

Work teams on Quail Emphasis Area are monitoring quail and songbird responses to intensive management efforts by conducting spring and fall surveys. Surveys the past couple years have shown stable quail numbers on the areas despite unfavorable weather conditions. **This shows quail's** ability to withstand poor weather conditions if favorable habitat is available.

In 2007 and 2008 devastating ice storms covered most of the state at some point. To make matters worse, severe flooding and heavy rains during the summers of 2007 and 2008 likely affected nesting success of quail and many other ground nesting birds. Fortunately, quail will attempt to re-nest a second and third time. By early November, many quail hunters on conservation areas and private land reported seeing young quail – a good indication of a late season hatch. Despite the poor nesting conditions, Department staff have also received favorable reports from private landowners who conducted fall whistle counts.



PRIVATE LAND ACHIEVEMENTS

In 2008, the Conservation Department and partners continued to assist private landowners by providing technical and financial assistance for their habitat projects. Through the Missouri Department of Conservation Landowner Cost Share Program over \$1 million was allocated to Missouri landowners in 2008, of which, approximately \$558,000 funded quail and grassland bird friendly practices, impacting several thousand acres of private land for northern bobwhite. Cost share dollars are commonly used to establish native grasses, eradicate invasive vegetation, prescribed burning, shrub plantings and woody cover enhancement.

The National Wild Turkey Federation Superfund Grant continues to provide critical funding habitat projects on private and public land that benefit wild turkey. This program provides over \$100,000 annually for native warm-season grass drills, herbicide, seed, or to hire habitat contractors. In many cases these projects also benefit northern bobwhite and other upland wildlife.

The United States Fish and Wildlife Service's, "Partners Program" is also helping restore habitat such as woodlands, savannas, prairies and glades for threatened or endangered species on private land, especially in targeted landscapes such as

grassland Conservation Opportunity Areas and Grassland Coalition Focus Areas. Through this cost share program, habitat work completed for threatened or endangered species will also benefit quail and other wildlife.



To be successful, Missouri's quail plan depends on private landowners working together to restore quail habitat. Here, Greg Dix from northwest Missouri is burning a weedy fescue field border in April to setback the fescue and to improve habitat conditions for bobwhite.



Creating good shrubby and brooding cover for bobwhite quail also benefits wild turkey.

In 2008, Private Land Services Division finished work on the Bobwhite Quail Challenge Grant. Through this program, the Department has provided \$190,000 in funds to Quail Forever, Quail Unlimited and the National Wild Turkey Federation. With matching funds from each conservation group, the program will provide approximately \$380,000 of habitat work to Missouri landowners interested in creating early successional and natural community habitats that will benefit northern bobwhite. Over the next few years, these organizations will work with Department staff to administer the Bobwhite Challenge Grant funds to landowners throughout the state. The Bobwhite Quail Challenge Grant was approved by the Conservation Commission in May 2007 and was endorsed by the Quail and Grassland Bird Leadership Council.

The Missouri Department of Conservation continued to fund the Conservation Equipment Grant Program which provided small loans to Soil and Water Conservation Districts and conservation groups to purchase small equipment such as native warm-season grass drills, sprayers and prescribed burn equipment. The small grant program enables the organization to rent the equipment to private landowners who need it to implement certain habitat practices such as establishing native warm-season grasses, conducting prescribed burns and spraying invasive vegetation.



A landowner spraying sericea lespedeza.



Over a three day hunt in December we moved 14 coveys on three different farms. We averaged over one covey per hour. The best hunt was six coveys in less than three hours. While the three farms where different, the key was each landowner have done an excellent job of managing native grass fields or field borders and have established covey headquarters for escape cover. In fact, 13 of the 14 coveys were in or very close to shrub thickets or edge feathering.

Aaron P. Jeffries, Upland Game Coordinator

PRIVATE LAND QUAIL FOCUS AREAS

In 2008, Department staff completed a review of the private land Quail Focus Areas. The purpose of the review was to establish focus area names, set measurable goals and redefine boundaries to better reflect where landowners have shown an interest in bobwhite quail management. The purpose of establishing Quail Focus Areas was to show landscape improvement in quail densities and to promote quail and grassland bird conservation. Today we have 34 private land Quail Focus Areas located throughout the state. Most focus areas are about 30,000 acres in size but some are even larger because of widespread landowner interest in restoring quail habitat.

Quail Focus Areas were identified where landowners were already managing for quail, near conservation areas with good quail habitat, and/or where conservation partners have expressed an interest in quail management. Department staff are focusing extra attention to these targeted landscapes to show a widespread improvement in quail densities. The plan is for Department staff and conservation partners to target landowners within these focus areas by marketing quail management and then providing technical and financial assistance to interested landowners. In the meantime, biologists continue to provide technical and financial assistance to landowners outside of focus areas to help these landowners meet their resource objectives.

Department staff and conservation partners continue to host workshops and field days in these focus areas to show landowners high quality habitat and how to implement the practices on their own or put them in contact with a contractor who can do the work for them. Some focus areas are providing landowners with signs (shown to the right) to promote their work and the Quail Focus Area. Outreach and Education staff are assisting field staff by developing marketing materials for each focus area. Biologists are also assisting landowners with fall whistle counts and bird monitoring to determine the effectiveness of their habitat work. Department staff report that landowners within focus areas are observing more quail in these targeted landscapes with major habitat improvements.



Private Land Conservationist Brent Vandeloecht is actively promoting quail habitat management in the Sweet Springs Quail Focus Area in Saline County. Landowners within the focus area have established CP-33 field borders and are managing CRP grasslands for bobwhites. A few CRP field borders in the focus area were selected for the national CP-33 bird monitoring project.



Chuck Morris and his son Conrad have been working with private land conservationist Jeff Powelson in the Covey Headquarters Quail Focus Area in northwest Missouri.

FARM BILL PROGRAMS

Still today, the Federal Farm Bill remains the single most important source of financial assistance for landowners interested in restoring wildlife habitat on private land. Several Farm Bill programs allow for quail and grassland bird habitat restoration and protection on private lands. Missouri continues to be a national leader in wildlife habitat restoration, especially bobwhite quail, through the Federal Farm Bill programs. This would not have been possible if it were not for the strong partnership between the Missouri Natural Resource Conservation Service, Farm Service Agency and Missouri Department of Conservation.



The Conservation Reserve Program and Conservation Reserve Enhancement Program (CREP) continue to be the more popular practices for bobwhite quail habitat restoration in Missouri. For example, targeted CRP practices like CP-33 and CP-38 are benefiting bobwhite quail and grassland birds on private land. Currently, Missouri has the third highest enrolled acres in CP-33 in the nation, and Cass, Scott, Saline, Audrain and Andrew Counties have the highest acres enrolled in the state. In recent months the sign-up has increased due to revised soil rental rates. Over 30,000 acres of **the Missouri's 32,600-acre** allocation have been enrolled.

Sign-up is underway for the CP-38 – SAFE practice which will bring an additional 19,200 acres of quail friendly habitat to Missouri. Most eligible acres are located in targeted landscapes such as greater prairie chicken recovery areas in southwest and north Missouri and sand prairies in the bootheel. The remaining acres will be allocated for quail friendly practices. The initial allocation of 6,250 acres in the quail practice was used by December and an additional 3,000 acres was recently added to the bobwhite practice.

Through Conservation Reserve Enhancement Program over 25,000 acres of quail friendly habitat was seeded and established to native warm-season grasses in 2008. While parts of 79 counties were eligible for CREP, a significant amount of the acres enrolled occurred in west-central, northeast and north-central Missouri. In fact, several thousand acres were established in Cass County in 2008. These additional acres helped Cass County become only the second county in the nation to achieve its NBCI habitat goal. As a part of the CREP program, native vegetation and mid-contract management will be required on most practices.



In 2007, Private Land Services worked with the Farm Services Agency and Natural Resource Conservation Service to require mid-contract management on new CP-21, CP-29 and CP-30 contracts over five acres. Mid-contract management was not previously required on these continuous CRP practices. As a result, management of these filter strips and buffers will provide better habitat for quail throughout the length of the contract.

The Department's strong partnership with both agencies has helped further enhance these CRP practices for northern bobwhite.



Native grass field borders established through cost share programs such as CRP and CSP provide much needed nesting cover in row crop country.

The Natural Resource Conservation Service held statewide sign-ups for both the Wildlife Habitat Incentives Program (WHIP) and Environmental Quality Incentives Program (EQIP). Both programs have been instrumental in helping landowners restore natural communities like prairie, glade, woodland and savanna, and to create early successional habitats for quail and other wildlife species. In 2008, a record \$1.4 million in cost share was allocated to new WHIP contracts in Missouri. Many of these contracts will benefit bobwhite and grassland birds such as greater prairie chickens. Existing WHIP and EQIP contracts, from previous sign ups, accounted for an additional 16,665 acres of quail and grassland bird habitat in 2008. These existing contracts are often 3 to 10 years in length and provide adequate time for the cooperator to complete planned practices such as edge feathering, native grass establishment, natural community restoration and invasive plant control.

The Conservation Security Program (CSP) continues to benefit production landowners and bobwhite quail. In 2008 the Natural Resource Conservation Service held a sign-up in the Lower Missouri Crooked Watershed, as a result, 44% of the accepted contracts agreed to establish native grass and wildflower field borders and shrubby cover on cropland, pastureland or hayland for bobwhite quail. In many cases participants agreed to convert 10% of their land into quail friendly habitat. Biologist estimate 275 acres of native grass field



Does your hunting plans include a youth?

borders will eventually be established in the Lower Crooked River watershed as a result of CSP. Since 2005, nine watersheds in Missouri have participated in CSP. These long-term contracts have resulted in several thousands of acres of quail friendly habitat on working lands. Most notably have been native grass field border and shrubby cover establishment in the Missouri bootheel. In fact, CSP was the reason why Scott County has been recognized as the first county in the nation to achieve its NBCI habitat goals. The results more than speak for themselves. Landowners and hunters in southeast Missouri are reporting a significant increase in bobwhite numbers.

HABITAT MANAGEMENT FOR GREATER PRAIRIE CHICKEN RECOVERY DIRECTLY BENEFITS NORTHERN BOBWHITE

In Grassland Coalition Focus Areas the Department and numerous conservation partners are working to improve private and public land for greater prairie chickens and grassland wildlife. Department staff and conservation partners continue to work with private landowners in grassland focus areas by providing technical and financial assistance for both quail and grassland bird practices such as native warm-season grass establishment, managed grazing, deferred grazing for nesting and tree removal from prairie vistas.

In grassland focus areas, Department work teams are restoring and re-establishing tallgrass prairie, removing undesirable trees and invasive plants and using managed grazing to improve habitat conditions on conservation areas. In many cases habitat accomplishments made for the greater prairie chicken benefit northern bobwhite. In fact, managers with conservation areas in southwestern Missouri Grassland Coalition Focus Areas have reported quail densities equal to those on many Quail Emphasis Areas. Private landowners completing habitat projects for greater prairie chickens and grassland birds have also noticed a positive response by bobwhites.

In 2008, Department staff and conservation partners began a greater prairie chicken trapping and translocation project to restore populations in parts of the state with suitable habitat. In March and April, male prairie chickens were trapped from the Smokey Hill Bombing Range and private land in **central Kansas and relocated to favorable habitat in the Marmaton and Wah'Kon-Tah Conservation Opportunity Area** in west-central Missouri. A second trapping was completed in August to move hens and broods to Missouri. By late fall some of the male chickens had moved several miles from



Habitat work done for greater prairie chickens benefits bobwhite quail and other wildlife species.

the release sites, while many of the hens and broods tended to stay closer to the release site. As expected, radio collared birds have also been lost to predators and other unknown factors. The surviving birds are currently being monitored by Department staff to determine the effectiveness of the restoration.

In the Grand River Grassland Conservation Opportunity Area in northwest Missouri, Department staff captured 12 males and 9 female greater prairie chickens on the Nature Conservancy's Dunn Ranch. The captured birds were weighed, banded and radio collared with a transmitter. For the past year, Department staff have been tracking the habitat uses of the collared birds to determine preferred nesting and brooding sites. This study has helped shed light on the daily activities of these remarkable grassland birds.



DEPARTMENT TRAINING

In 2008, Department staff participated in workshops and training sessions devoted to quail habitat management. These classes provided resource professionals the latest information on research projects and effective habitat management techniques for natural communities and early successional habitats.

The Missouri Quail and Grassland Bird Technical Committee have played a critical role in advancing quail and grassland bird conservation in our state since 2003. The committee was formed to develop marketing strategies, staff training classes, habitat reviews and future initiatives related to quail and grassland bird conservation. The committee meets periodically and is made up of representatives from the Missouri Department of Conservation, Natural Resource Conservation Service, University of Missouri and United States Forest Service. Each year the technical committee hosts workshops for staff such as Quail 101, 201 and 301 and the Quail Emphasis Area Field Appraisals.

The following are members of the Quail and Grassland Bird Technical Committee: Beth Cole (MDC), Bill White (MDC), Bob Pierce (UMC), Brent Vandeloecht (MDC), Bryan Gragg (MDC), Chris Hamilton (NRCS), Dave Hoover (MDC), Jamie Barton (MDC), Jeff Powelson (MDC), John Dwyer (UMC), Justin Gailey (MDC), Karen Hudson (MDC), Keith Wollard (MDC), Kleiden Frost (USFS), Larry Heggemann (MDC), Lee Metcalf (MDC), Lisa Potter (MDC), Scott Sudkamp (MDC), Tom Dailey (MDC), and Tony Elliott (MDC). Thank you for your support and expertise in quail and grassland bird conservation.



In February, staff participated in several quail and grassland bird training sessions. In early February, Protection Division participated in a quail habitat training session during their annual Wildlife Code review. The training highlighted initial results from the radio-collared quail project at Davisdale and Locust Creek Conservation Areas and current regulations on captive-reared quail. Later in the month, over 60 biologists participated in a quail and greater prairie chicken management workshop at the Missouri Natural Resource Conference. The course highlighted prairie reconstruction and management, woodland restoration and management, patch burn grazing for quail and grassland birds, and bird monitoring results. A noticeable theme at the workshop was the value of natural community restoration and management for quail and greater prairie chickens and how much of the work done for prairie chickens and grassland birds is benefiting northern bobwhite.



In March, the first Quail 301 class was held in Jefferson City. Over 80 biologists participated in the two day class which covered a variety of topics from habitat management, research highlights, revised quail hunting regulations, and how to effectively market a private land Quail Focus Area. Information was also gathered from staff on future training and marketing needs.

In June, two Quail 201 courses were held for Department staff and conservation partners. The first was held at Thomas Hill Reservoir Wildlife Management Area and the second at the White River Trace Conservation Area, both areas are designated Quail Emphasis Areas. Over 50 Department staff attended the classes which provided training on quail habitat requirements, management, budgeting, and how to develop a long-term plan. Over the past two years, six Quail 201 classes have been held for Department staff and conservation partners.

Wildlife Division biologists, Lee Hughes and Mike Leahy, hosted a woodland management and restoration workshop at Bennett Springs State Park to train 25 resource professionals on woodland identification, restoration, management and wildlife value including northern bobwhite. The workshop included tours of woodland communities on the Lead Mine Conservation Area and Bennett Spring Natural Area.



Biologists Steven Noll and Chad Smith evaluating habitat conditions at Davisdale Conservation Area

In 2008, Wildlife Division completed Quail Emphasis Area Field Appraisals on Bunch Hollow, Poosey, William White, Bois D'Arc, Bonanza, Henry Sever and Davisdale Conservation Areas. Despite an abundance of chiggers and ticks, biologists enjoyed the opportunity to discuss habitat conditions and management options. The purpose of the review is to evaluate habitat conditions and management for quail on each Quail Emphasis Area.

RESEARCH AND MONITORING

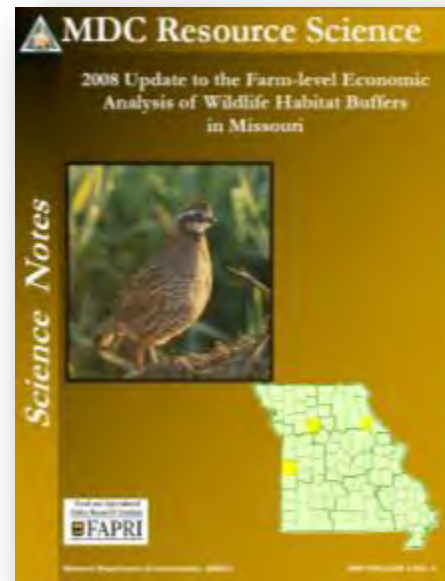
Resource Science Division continues to monitor quail and songbird densities on 60 crop fields with CP-33 buffers and 60 unbuffered crop fields as a part of the national CP-33 monitoring project. Nationwide, CP-33 monitoring has shown a positive response by bobwhite and several songbirds on established CP-33 buffers around crop fields compared to crop fields without buffers. Many of the field borders are at least two years old and are finally providing favorable habitat for northern bobwhite.

Resource Science and Private Land Services staffs have initiated a case study to determine the effectiveness of having several farms with quality quail habitat close together compared to being scattered across the landscape. The Knox County Quail Focus Area (in central Knox County) and Sweet Springs Quail Focus Area (in southwest Saline County) were chosen because several landowners have restored significant acres of quail friendly habitat. Areas outside the focus areas, where little quality habitat remains, were chosen as control sites. Department staff are conducting fall whistle counts in the targeted area and outside the focus area to determine quail densities.

Resource Science Division and the **University of Missouri's Food and Policy Research Institute (FAPRI)** completed a farm-level economic analysis of participation in CP-33. Landowners from Ralls, Carroll, and Bates counties enrolled in CP-33 participated as panelists for a representative farm. Using real world yields, prices, operational costs, and soil rental rates within a sophisticated computer model, the economics were modeled for a 10-year period through the study. The information produced through the study are used to demonstrate the cost-benefits of participating in the CP-33 program on a statewide scale.

Wildlife Division and Resource Science staff are completing a three year telemetry study on bobwhite quail on the Davisdale Conservation Area in Howard County and Locust Creek Conservation in Sullivan County. This informative study provided timely data on the preferred habitat types for bobwhite for nesting, brooding, roosting and escaped cover throughout the year. Information from this study has been share with private landowners and biologists at several workshops, conferences and national meetings.

In 2008, Quail Unlimited funded a similar telemetry study in Andrew, Cass and Osage Counties on private land. The goal of the study is to determine the habitat types used and behaviors of quail on private land, which is actively being managed for quail. By early November, several birds have been trapped and fitted with radio collars.



A landowner's son with a 60-day old quail that was captured on November 13th.

The birds are currently being tracked by Department staff, Quail Unlimited members and private landowners. Early reports from Andrew County indicate the radio collared birds rarely venture very far from edge feathering or native shrub thickets and are using recently disturbed areas in CRP fields, idle or planted food plots, unharvested crop fields and CP-33 field borders.



In Osage County the birds are staying in a small area and are moving between several small, weedy old fields and open woodlands where the landowner recently completed both wildlife stand improvement and a prescribed burn. Observations from the Davisdale and Locust Creek telemetry study and Osage and Andrew County study have helped reinforce results of past studies and what biologists have been recommending to landowners – lots of bare ground and shrubby cover.

REACHING OUT TO MISSOURIANS

An important part of Missouri's quail plan is outreach efforts related to improving habitat and outdoor recreation. Each year, Department staff use a variety of media outlets, landowner workshops, field days and special events to promote quail habitat management, upland game hunting and outdoor recreation.

In particular, Department staff and conservation partners annually host special hunts for youth, disabled hunters and women. These special events provided novice and experienced hunters an opportunity to learn more about upland game hunting, hunter safety and the basic habitat requirements of northern bobwhite.

In 2008, staff held several landowner workshops and field days to promote quail habitat management. Each year, biologists host workshops on Quail Emphasis Areas or private farms where landowners have done considerable work for northern bobwhite. In some counties private land conservationists have worked closely with one or two landowners to create demonstration farms for future landowner workshops. These field days and demo farms provide an opportunity for other landowners to observe good habitat management practices and for department staff to meet with landowners. In many cases, workshops were hosted in private land Quail Focus Areas to spark landowner interest in quail management.



Conservation Agent Tom Skinner working with eager hunters at a Quail Forever hunting event in Macon County.

In 2004, a Quail and Grassland Bird Leadership Council was formed to increase awareness and support for quail and grassland bird recovery efforts. In 2008 the Council was expanded to include representatives **from the Missouri Cattlemen's Association**, Missouri Soybean Association, Farm Service Agency and Natural Resource Conservation Service.



In April 2008, the Council met to hear reports from quail biologists on recent habitat accomplishments, bird monitoring results and marketing efforts. Don McKenzie, NBCI Coordinator, also attended the meeting and provided an update on the current status of the NBCI. Other special guests included Scott County conservation partners who received the NBCI Group Achievement Award for their outstanding effort to restore quail habitat in Scott County.

In October, the Council met in Cole Camp Missouri near Hi Lonesome Prairie and Mora Conservation Areas. The fall meeting highlighted the importance of targeted efforts and strong conservation partnerships. The Greater Prairie Chicken Recovery Plan and Master Naturalist programs were highlighted during the evening dinner. The Benton County **Cattlemen's Association** cooked an incredible dinner for all those who attended. Over 40 people, including Cole Camp Community leaders attended the informative evening meeting.



Biologists Steve Clubine and Steve Cooper talking to council members on the benefits of patch burn grazing.

The second day included a field trip to Hi Lonesome Prairie and Mora Conservation Areas where council members saw the value of greater prairie chicken management for bobwhite quail and grassland wildlife. Hi

Lonesome Prairie Conservation Area is a popular destination for birdwatchers and naturalists. The area is managed primarily with patch burn grazing which has created excellent habitat for greater prairie chickens and bobwhite quail.

The Council, made up of agricultural and conservation groups, farmers and upland bird hunters, has played a role in the creation of the youth quail and pheasant seasons, creation of the Bobwhite Quail Challenge Grant, increased public and private land management efforts, endorsement of staff training programs, and provided recommendations to USDA on the CP-33 and CP-38 programs.

In June 2008, twenty-four high school students participated in the annual Quail Academy at the University of Central Missouri in Warrensburg. Sponsored by Quail Unlimited, the week long course provides high school students a unique opportunity to learn about quail and grassland birds, leadership skills, hunter safety, sporting clays, and a great chance to have fun and meet new people. Department staff assisted with the workshop by hosting a field trip at the Turkey Kearn Memorial Conservation Area and teaching the eager students about quail biology and habitat management at the University of Central Missouri Shooting Range and Education Center.



In August, Quail Unlimited held their national convention in Springfield, Missouri. The past two years the event was held in the greater Kansas City area. Department of Conservation biologists **Beth Cole and Aaron Jeffries were guest speakers at this year's convention** and provided updates on the CP-33 monitoring project and other quail research projects, respectively. Earlier in the year, Quail Unlimited held their annual state chapter meeting in Jefferson City at the Runge Nature Center. Again, Department staff provided important updates to Quail Unlimited members on recent efforts to restore quail and grassland bird habitat in Missouri.

In June, the University of Missouri, Department of Conservation, and the Missouri Soybean Association hosted a bobwhite quail and native plant field day at the Bradford Farm Research and Extension Center in Columbia. Over 150 people attended the field day which included several wagon tours of quail habitat demonstrations and agriculture research plots on the farm. **This year's** workshop also included presentations from Tom Dailey and Bob Pierce on the latest in quail management. Special thanks to the Missouri **Cattlemen's Association** for providing hamburgers for all the hungry participants.



Over the years, the University's Bradford farm has been a popular destination for other conservation groups and organizations. Last summer, Quail Forever held part of their annual state meeting at Bradford Farm. Chapter members were treated to a guided tour of the farm. The evening event also included a presentation by Quail Forever CEO, Howard Vincent on the new Farm Bill. Howard discussed the benefits of special conservation programs such as CP-33 and the new SAFE (CP-38) practices. He also spoke about the need to develop more partnerships and how quail recovery cannot be achieved in just a few years but that with our joint efforts, we will see increases in the state.



Quail Forever members touring Bradford Farm.

In recent years, over 5,000 people have participated in educational programs and field days at Bradford Farm including landowners, agribusinesses, governmental agencies, Future Farmers of America Chapters, and other youth groups. Quail and grassland bird management and monitoring are an important part of the educational goals of Bradford Farm.

Bradford Quail Focus Area and Bradford Research and Extension Center

For many years, the Bradford Research and Extension Center (BREC) near Columbia has been an active participant in promoting quail habitat management. BREC holds several habitat field tours each year that showcase different quail habitat management practices such as edge feathering, shrub plantings, perennial food plots, native grass burning and disking techniques, as well as CP33 habitat buffers. BREC is involved in more than just quail habitat practices. They have also installed practices such as native grass plantings in diversion channels, alternative forages of native grasses and forbs, invasive species control, and wildlife friendly biofuel mixes that demonstrate to landowners that applying these practices is not only economically feasible and helps to protect natural resources, but can also provide quality habitat for quail and other species of wildlife at the same time. This year, in addition to the habitat management practices, BREC trapped 4 adult male quail and attached radio transmitters to track their movements on the farm. The radioed quail were almost exclusively found using the perennial food plots, weedy fields that had recently been burned or disked and within woody draws that had been managed to provide a shrubby understory. During the Bobwhite Quail and Native Plant Field Day, at least 150 landowners had the opportunity to see first-hand where quail were located on the farm when telemetry locations were found during the tour. Also for the first time this year, Fall Whistle Counts were conducted in October to monitor the quail population trends on BREC. The surveys proved that quail habitat management works. The density estimate was 0.44 quail per acre. This is equivalent to approximately 38 coveys on BREC and the surrounding landscape. This estimate far outreaches the goal set for the entire Bradford Focus Area of 1 quail per 15 acres.

On a bright sunny morning in October, three northeast Missouri high school FFA shooting teams received free shotgun shells for trap shooting from the Mark Twain Chapter of Quail Unlimited. The Madison, Paris and South Shelby teams each received five cases of shells worth \$375 from this active Quail Unlimited chapter. The shotgun shells are one example of how Quail Unlimited is supporting outdoor shooting sports. Bob Riley, chapter president, stated that he looks forward to this presentation each year. "Seeing the youth, along with their excitement and enthusiasm about conservation and shooting sports, is encouraging for individuals like me. These kids are the future of shooting sports, wildlife conservation and conservation groups such as Mark Twain QU."



Paris High School FFA Shooting Team and member of the Mark Twain Chapter of Quail Unlimited.

Seniors Quail Hunt

The Mid-MO Young Guns Quail Forever Chapter held a "first in the state" Seniors Hunt for members of the local nursing home. This past October, Jim Knowles, habitat chairman for the Mid-MO Young Guns chapter of Quail Forever came up with a brilliant idea. Jim has been doing habitat work on his Shelby County farm for many years in order to increase his quail and pheasant population. He religiously burns the farm and plants food plots as well as doing other management activities including strip disking and edge feathering.

The chapter rallied around Jim's idea and in addition to a women's pheasant hunt that morning, they held the seniors hunt in the afternoon. It turns out that the seniors were content to visit with the dogs, ride along in the 6-wheelers and on the wagon and watch good bird dogs work. The seniors had a blast that day, with a lot of discussion about how they used to hunt and their favorite memories. It was a great event for both the chapter and the seniors. The chapter plans their rabbit hunt and their youth pheasant hunt for this winter!



MARKETING AND OUTREACH

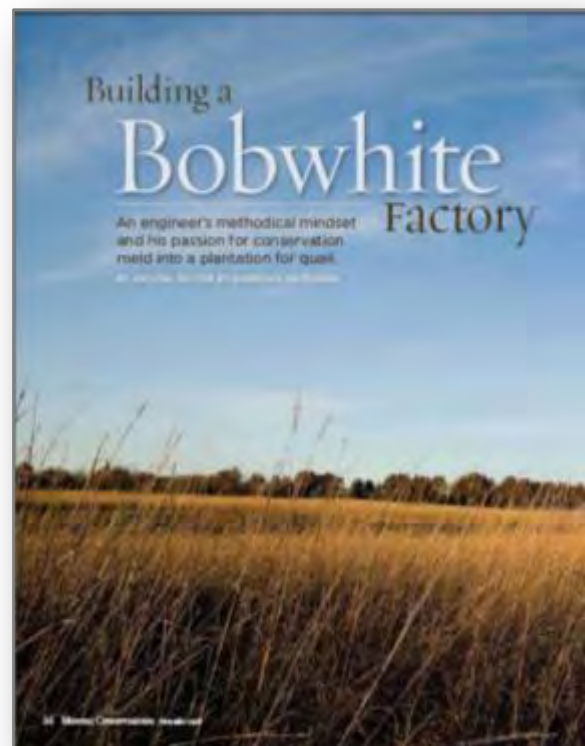
In 2008, Outreach and Education Division assisted field staff by providing a variety of outreach materials related to quail and grassland birds. For example, every issue of the *Missouri Conservationist* in 2008 had an article or news item on habitat management, Quail Emphasis Areas, Quail Focus Areas or landowner success stories related to quail or grassland birds.



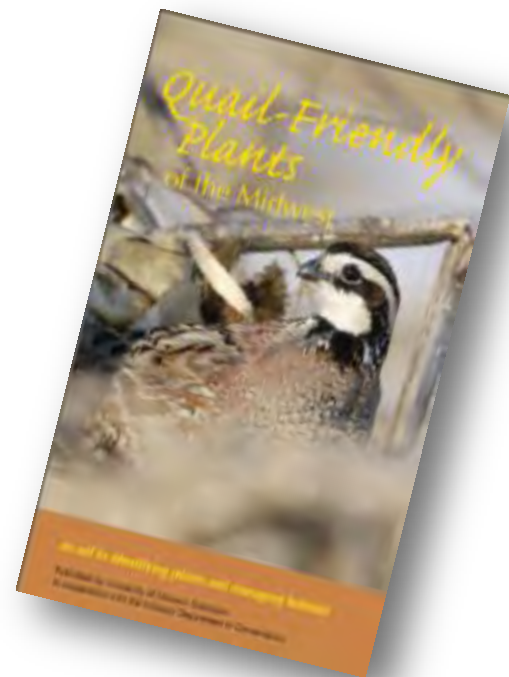
Outreach and Education staff are also helping field staff by developing new marketing resources related to private land Quail Focus Areas, grassland Conservation Opportunity Areas and quail habitat management. For example, **several short videos on habitat management and quail hunting have been posted on "YouTube"**. Department videos on quail hunting are posted at <http://www.youtube.com/user/MO hunting> and quail habitat management at <http://www.youtube.com/user/MO landowner>.

In December, Department staff completed work on a blog devoted to quail hunting and habitat management. The "Missouri Quail Recovery – Habitat is the Key!" blog can be found at <http://morequail.blogspot.com>. Special thanks to Outreach and Education staff Matt Seek, Syd Hime, Bonnie Chasteen, Kipp Woods, Karen Hudson and many others for their expertise and artistic eye with recent quail and grassland bird marketing efforts.

The November 2008 issue of the *Missouri Conservationist* included an outstanding story by Jim Low on how Jeff Churan has turned his farm in northwest Missouri into a quail factory. The story highlights the steps Jeff has taken over the years to improve his property for northern bobwhite and his family. Jeff has used a variety of habitat practices including prescribed burning, food plots, covey headquarters and edge feathering to improve his property for quail. His work and dedication helped Churan win the 2006 Adopt-A-Covey Award from Quail Unlimited. However, the proof is in the birds. "In 1998, hunters were finding a covey every 40 to 60 minutes. During the 2005-2006 season, they averaged one covey every 24 minutes. On one hunt, they moved nine coveys in 3.5 hours."



Available to quail enthusiasts is the new reference, *Quail Friendly Plants of the Midwest*. This informative book was written and published by the University of Missouri Extension in cooperation with the Department of Conservation. This plant identification book features 56 plants used by quail. The book includes color pictures, plant characteristics and quail habitat needs. Special thanks to Rob Chapman, Scott Sudkamp and Bob Pierce for developing this helpful and user-friendly guide.



Many other conservation groups are also helping promote quail and grassland bird conservation by publishing stories and habitat management articles. In 2008, articles on quail habitat management or editorials by Department biologists Tom Dailey, Aaron Jeffries or Bill White appeared in the *Covey Rise*, *Quail Forever* and *Quail Unlimited* magazines. Department biologists frequently contribute stories to these three magazines devoted to quail conservation.

Today, other conservation partners and organizations also include information on quail and grassland bird habitat management and conservation efforts. The Missouri Prairie Foundation (MPF) magazine and website includes a habitat management section **by Richard Datema, MPF's field manager**. This advice column on land management provides landowners tips and recommendations on how to manage their prairie or grasslands for wildlife. *Progressive Farmer* has also devoted a webpage to quail habitat management.

Department staff also broke new ground in 2008 with a quail habitat management article in *MO Beef*, the **Missouri Cattlemen's Association** magazine. The article highlighted quail habitat needs and ways to maintain quality cover for quail and wildlife in grazing systems. MFA also published two articles about private land Quail Focus Areas and habitat management in *Today's Farmer*. The articles in **MFA's magazine** have helped **market the Department's private land Quail Focus Areas**. MFA's popular *Agronomy Guide* also includes a section on quail habitat management and useful herbicides. The *Agronomy Guide* is available at all MFA farm supply stores. Private Land Services has also started work on placing quail habitat advertisements in farming and rural magazines to promote practices such as CP-33 and CP-38. The hope is to increase landowner interest in these popular and economical habitat practices.



In October, the National Wild Turkey Federation shot a three day fall turkey hunt on private land in central Missouri where extensive habitat work has been done for quail. The past couple years, the landowner has established native grass field borders, edge feathered, and restored woodlands and glades to improve habitat for bobwhites. As a **result of the landowner's work, wild turkeys have** also responded. The past two spring seasons a dozen gobblers have been harvested from this 350 acre oasis for wildlife.

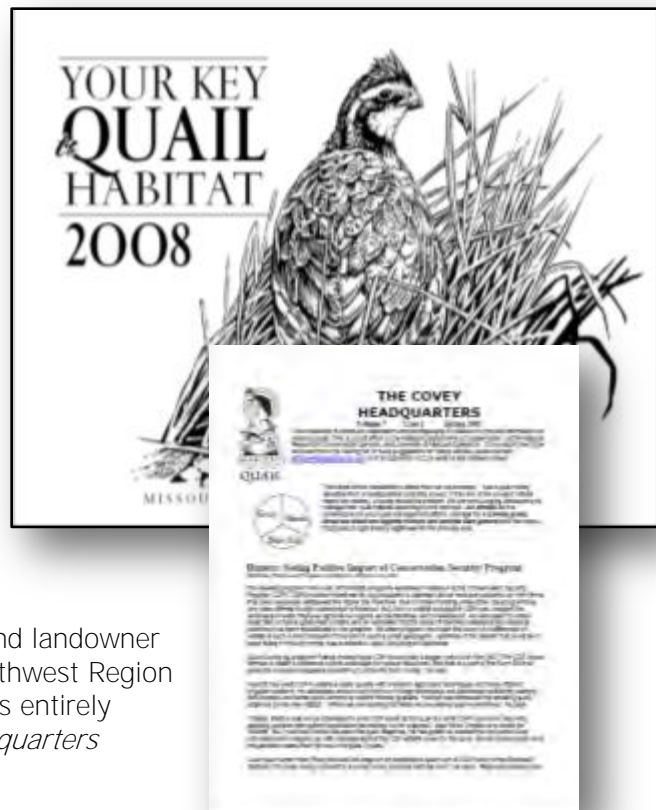
During the three day production, NWTf staff filmed a successful fall hunt **with the landowner's son and** footage on how quail habitat management benefits wild turkey. The habitat video highlighted how to maintain diverse old field habitats with light disking and prescribed burning and how to restore woodlands and glades by thinning out undesirable trees and introducing prescribed fire. The National Wild Turkey Federation will feature the story and video in their magazine and **"Get in the Game" TV** series this spring. The landowners success and **NWTf's interest in future videos reinforces the point** that habitat management for northern bobwhite is beneficial to many other species.



One of twelve gobblers harvested from a farm where intensive management has recently been done for quail!

Once again, **MDC's** Lee Metcalf and Matt Seek teamed up to create the **"Your Key to Quail Habitat 2008" calendar**. Similar to the **Department's Natural Events Calendar**, the quail calendar has quail and grassland bird art work and timely habitat management hints and life history traits of quail and grassland birds. The 2009 **"Your Key to Quail Habitat" calendar is free** and available at your local Department office. This year 15,000 copies were printed and are currently being distributed to landowners.

The *Covey Headquarters Newsletter* continues to provide quail enthusiasts the latest information on quail habitat management, conservation program updates and landowner success stories. Since 2002, staff from the Northwest Region have published the quarterly newsletter which is entirely devoted to bobwhites. Today, the *Covey Headquarters Newsletter* has over 10,000 subscribers.



REGIONAL HIGHLIGHTS

A key element of the state recovery plan was the development of Regional Quail Plans. In 2004, Department staff in each region created goals and objectives to restore quail and grassland bird habitat on private and public land. Department staff have been working with landowners and farmers to improve quail habitat on recreational and working farms. Field staff have also increased public land management efforts on Conservation Areas throughout the state. Another key component has been developing regional workshops and field days to promote quail and grassland bird habitat management and outdoor recreation related to quail conservation. It will ultimately be local and regional efforts that restore bobwhite habitat at a landscape level.

CENTRAL REGION

Covey Junction Quail Focus Area Demonstration Farm

In the middle of the Covey Junction Quail Focus Area lies Bruce and Jan Sassman's farm. The private land focus area covers portions of Gasconade, Maries and Osage Counties. In the future the **Sassman's** farm will serve as a demonstration site for workshops and field days. With the help of private land conservationist Kyle Lairmore, they have been working to restore 50 acres of native grass and forbs as well as about 40 acres of woodland/glade/savanna restoration. The farm had been a mix of fescue pasture and cropland. Along with all the wildlife projects they are also developing **an educational site as well.** The Sassman's feel the key to wildlife restoration on a landscape scale is educating the public. So to help with this, they are restoring an old barn on the farm which will be used as an education center for landowner workshops and school programs. Jan is a teacher by trade, so working with adults and youths, teaching them about native grasses and forbs is her goal. She has attended multiple courses at Shaw Nature Center learning about native plants, which she plans to share with others on the farm. They also have a growing specimen garden by the barn which they have planted every plant species, plus some, that can be found on the farm. The purpose is to allow people to study the plant in the garden, then go out into the grassland and find it. Both Jan and Bruce are very active in the local Four Rivers Quail Forever Chapter and plan to have a habitat display and habitat raffle at this year's banquet.



Jan and Bruce Sassman working with private land conservationist Kyle Lairmore on their Osage County Farm.

Public Land Managers Work to Restore Quail Friendly Habitats

Constantly wet and muddy conditions hindered public land management efforts the past year as 2008 went down as one of the wettest years on record. Despite the unfavorable field conditions, Central Region field staff continued the annual task of treating invasive plants such as tall fescue, sericea

lespedeza, autumn olive and bush honeysuckle. In 2008, the work team of Steven Noll, Leon Borges, Sabe Canton and Brandon Hodges did an exceptional job of controlling tall fescue and improving early successional habitat for bobwhites with prescribe fire and strip disking on the Davisdale Conservation Area in Howard County.



Like the rest of the state, efforts made to provide dove hunting opportunities were setback by continuous spring and summer rains. In some cases staff or permittee farmers were not able to plant fields until July or not at all. By late July, work teams feverishly worked to plant millet food plots for dove hunting or to burn fallow wheat fields. By fall, work teams begun strip disking and spraying fescue in old fields and grasslands to improve brooding cover for bobwhites.

During 2008, work teams at Davisdale, Whetstone Creek and Danville Conservation Areas started or completed large woodland restoration projects that will eventually benefit bobwhites, wild turkey and other wildlife. Several other woodland restoration projects are scheduled for these and other conservation areas. Wildlife and Forestry Division staff have been rather creative in finding ways to complete the task of thinning overstocked woodlands. Area managers are using regional workdays, conservation contractors or timber sales to remove undesirable trees. After thinning out the unwanted trees, crews try to reintroduce fire to the site on a three to five year cycle to encourage native wildflowers and grasses. In most cases restoration will take 10 to 20 years to fully restore woodland communities.



Biologists Chad Smith and Jeff Demand discussing future management at Whetstone Creek Conservation Area, a designated Quail Emphasis Area in central Missouri.

Lamine River Conservation Area Workday

On December 30, Central Region staff from Wildlife, Forestry, Fisheries, Private Land Services and Outreach and Education Divisions participated in a habitat workday on the Lamine River Conservation Area, a designated Quail Emphasis Area in Cooper and Morgan County. This year, staff worked to improve woody cover for bobwhites, rabbits and other wildlife by edge feathering fencerows and timber along crop fields and old fields on the Lamine River Conservation Area.



Wildlife management biologists Kent Korthas, estimates over 8,300 linear feet of edge feathering was completed in one day on the conservation area. On average, it takes an entire year to complete this amount of edge work.

The Central Region uses annual workdays to complete significant habitat and area maintenance projects on conservation areas throughout the region. The workdays also give staff the opportunity to work together and share experiences. Workdays were also held on Davisdale and Whetstone Creek Conservation Areas, both are designated Quail Emphasis Areas.

“Hunted Davisdale Conservation Area yesterday and WOW! I have never seen so much quality quail cover. We found some real nice milo and buffer strips that looked real promising. Found some birds too. I think I am going to go back again tomorrow and give it another try.”

Matt Wehrle

Quail Unlimited Ozark Border Bobwhites Scores a Hit with Youth

The Ozark Border Bobwhites Chapter of Quail Unlimited held its first youth event on December 6, 2008. This event was held in partnership with the Missouri Department of Conservation. Promoting the hunting heritage and serving youth is part of the mission of this local organization, and this youth event helps to fulfill the chapter's mission. The event was held at Quail Creek Game Farm near Union. Department private land biologists Jeff



Dierking, Kyle Lairmore and John Knudsen were on hand to assist with the hunt and to talk about quail habitat management. The group received safety instruction followed by clay target shooting. The remainder of the morning was spent on an actual hunt for bobwhites. After lunch, the group was given an opportunity to hunt pheasants. There were 12 young people who participated. Their participation also included a complementary membership in Quail Unlimited. Each year the Ozark Border Bobwhites Chapter of Quail Unlimited hosts a habitat workshop and a banquet in Gasconade or Franklin County.

Woodland Restoration Efforts

In the rolling river hills in northeast Moniteau County, a landowner is halfway through a woodland restoration project that equals many public land projects. Over the past three years the landowner has worked to thin several hundred acres of degraded woodland. The massive private land woodland restoration project would not have been possible if it was not for the federal EQIP and WHIP programs which have provided the necessary cost share to hire conservation contractors who have removed cedar, locust, elm and undesirable oak and hickory from the degraded woodland sites. With technical assistance and burn plans from private land conservationist Chris Newbold, the landowner has successfully completed several prescribed burns to reduce the amount of dead woody vegetation lying on the ground. Less than one year after the prescribed burn, Chris and the landowner have already noticed a variety of native grasses and wildflowers in the woodlands. The landowner has also seen bobwhites, wild turkey and white-tailed deer using these restored sites.



Tipton Upland Plain Quail Focus

Private land conservationist Chris Newbold continues to work with recreational landowners and production farmers in the Tipton Upland Plain Quail Focus Area in western Moniteau County. For several years, a few landowners have aggressively managed their farms for bobwhites and is one reason why Department staff are targeting this part of Moniteau County for bobwhites. Landowner success stories have been practically unbelievable as quail densities have increased dramatically on these intensively managed farms. Landowners in the focus area actively managing CRP grasslands with prescribed fire and light disking and have completed vast amounts of edge feathering. In recent years, a few production farmers have taken advantage of CRP and have enrolled their crop field edges into CP-33.



Friends Ron Lehman and Daryl Raithel have worked to restore quail habitat on their adjoining farms in the Tipton Upland Plain Quail Focus Area.

KANSAS CITY REGION

Private Land Management

In October, Cass County was recognized as only the second county in the nation to achieve its Northern Bobwhite Conservation Initiative habitat goals. In 2008, bobwhite numbers continued to improve with several favorable reports from hunters and landowners in Cass County and the Cass County Quail Focus Area. Private land conservationist Andy Carmack feels quail are making a quick comeback after two horrible years of summer floods and winter ice storms. The quick recovery may not have been possible if it was not for the widespread habitat improvements in the county.



Much of the work completed in Cass County would not have been possible if it was not for active landowners and strong conservation partners like the West-Central Missouri Chapter of Quail Unlimited. Over the years, Department biologists have worked with private landowners to enroll field edges in CP-33 and entire fields into CRP and CREP. Other conservation cost share programs such as **Quail Unlimited's Quail Habitat Initiative** and **MDC's Landowner Assistance Program** have helped filled in the gaps where federal programs could not be administered.

In 2008 Department staff in the Kansas City Region continued to focus management efforts on targeted landscapes for bobwhite quail and greater prairie chickens. Private land conservationists Sharron Gough and Kathy Cooper continue to work passionately with landowners in the **Wah'KonTah** (near El Dorado Springs) and Hi-Lonesome/Cole Camp Conservation Opportunity Areas, respectively. These Conservation Opportunity Areas not only include greater prairie chicken focus areas but also quail focus areas. The ultimate goal in these focus areas is to restore open grasslands for grassland birds including prairie chickens and bobwhites by removing trees and restoring tallgrass prairie and converting fescue pastures to native warm-season.



As a result of CP-33 field borders and other conservation practices and programs Cass County is only the second county in the nation to achieve NBCI habitat goals.

Mother Nature Challenges Public Land Managers

Like the rest of the state, extreme weather conditions – whether ice, snow or flooding – hindered habitat restoration efforts in 2008. Despite the extremely wet conditions, public land managers were able to complete several planned prescribed burns on public lands. Staff continue to aggressively burn public land grasslands in greater prairie chicken focus areas such as Turkey Kearn, Hi-Lonesome Prairie and Taberville Prairie Conservation Areas in west-central Missouri. Staff use a year-round burn philosophy to create a variety of habitat conditions for grassland wildlife.

On some conservation areas, public land managers have implemented patch burn grazing (a type of managed grazing) by contracting with local cattle producers to graze public land prairies and grasslands. This type of managing grazing benefits grassland wildlife by providing a variety of early successional habitats, and also benefits livestock producers by providing summer forage and good weight gains during the summer.

At Harmony Mission Lake/Peabody Conservation Area in Bates County, a designated Quail Emphasis Area in the Kansas City Region, staff were able to complete 139 acres of prescribed burning and 26 acres of fescue eradication in 2008. In-between the frequent rain events, Wildlife Division staff were busy edge feathering and spraying tall fescue field edges on the conservation area. In fact, staff completed almost 10,000 linear feet of edge work on the conservation area last year.

This winter, staff are feverishly working with a skid-steer to reclaim overgrown old fields and to complete additional edge feathering around the area. The district work team, which also manages Four Rivers Conservation Area (the state's largest managed wetland area), is wishing for drier conditions in 2009.



Despite being a “seepy mess” for most of the year, staff at Harmony Mission Lake Conservation Area successfully completed several prescribed burns in 2008.



Wildlife Division staff had high hopes of beginning prairie restoration work on Mora Conservation Area in Benton County this year. This complex plan involves removing undesirable trees and converting unwanted vegetation to a native grass and wildflower mix. Unfortunately, muddy conditions delayed most of the habitat work until 2009. In the meantime, work teams focused their



efforts on the Ionia Ridge Conservation Area in Benton County. Last year, staff spent a considerable amount of time spraying invasive plants such as tall fescue, removing trees and unwanted fences from the conservation area.

Truman Lake District

The district work team of Monte McQuillen, Terry Bath, Larry White and Mark Sperry and part-time staff Dan Nash and Gerald Newman worked to improve habitat for bobwhites on public land around Truman Reservoir. The work team manages over 20,000 acres of United States Corps of Engineers public land around Truman Reservoir. In between record lake levels, the crew worked to improved old fields around Truman Reservoir by conducting prescribed burns, strip disking, invasive plant control or food plot establishment. In 2008, the work crew impacted at least 1,100 acres in Henry County alone.



NORTHEAST REGION

Bee Trace District

Public land management has focused on improving habitat on Thomas Hill Reservoir Conservation Area, a designated Quail Emphasis Area (Macon and Randolph County) and Atlanta Conservation Area (Macon County). In 2008 resource forester Brian Schweiss and wildlife management biologist David Stroppel completed a forest inventory of Thomas Hill Reservoir to identify potential woodland restoration sites. The long term goal is to restore open woodlands around the lake for bobwhites, wild turkey and other wildlife. David and Brian are hoping to contract timber sales on the area to complete some of the necessary thinning and reduce the total cost of the project. Depending on the site, woodland thinning and restoration can cost \$100 to \$400 per acre.

The Salt River Quail Focus Area located east of Macon saw some additional habitat work done in 2008 with about 500 acres prescribed burned and another 50 acres of warm season grass established. **Unfortunately, due to this year's wetter than normal conditions** and past ice storms, **private land conservationist Ted Seiler hasn't heard many great reports about high quail numbers** last fall. Nonetheless, good habitat will help speed up recovery when favorable weather conditions return.

The biggest highlights in Macon County this year were the first ever Quail Forever youth **and women's pheasant hunts**. At both hunts, participants were given a brief overview of quail and pheasant habitat requirements, and a firearm safety lesson. The youth hunt was held in January 2008 and had enough kids signed up that the hunt had to be divided into a morning and afternoon hunt (nearly 20 youth participated). Every kid bagged at least one pheasant, and all had a great time. The **women's hunt had 10 participants and once again, all had a great time**. For many, it was their first time hunting and for some, the first time firing a shotgun.



Macon County SWCD recognizes the Timpe family as "Conservationist of the Year"

Larry Timpe (shown to the right), chapter president of the Mid MO Young Guns and his wife, Sandy Timpe, chapter treasurer were awarded the Macon County Conservationist of the Year at the local Soil and Water District Annual Meeting in Macon. Larry and Sandy were praised for their efforts at increasing youth and women's conservation education in the area through their work with Quail Forever. Presenting the award was Ted Seiler, Private Land Conservationist.



Fabius River District (Clark, Lewis, Knox and Scotland)

The 12,000 acre Quail Focus Area located in Knox County continues to make great strides in developing quality quail habitat throughout the area. Since the inception of the area in 2006, 15 landowners have developed quail management plans and implement practices on 22 different farms. Nine miles of CP-33 buffers have been installed along with nearly 200 new edge feathered covey headquarters. Landowners in the focus area were featured in July 2008 issue of the *Missouri Conservationist*. In April 2008, private land conservationist John Pinkowski provided an update to the Quail and Grassland Bird Leadership Council on the successful focus area, recent habitat accomplishments and bird responses to management efforts.



The annual habitat tour of the area was well attended again this year and provided the attendees with an opportunity to be updated on the progress of the area and to view the quail habitat accomplishments of their neighbors (Knox County QFA members are pictured to the right). Recommendations by a four member volunteer landowner advisory committee to the Department of Conservation have been implemented including a fall whistle count survey of the area.



Landowners are seeing the results of their hard work pay off with higher quail numbers and this in turn has led to additional cooperators joining the cause over the past year. In fact, fall whistle counts conducted by Department staff and landowners heard twice as many coveys in the focus area as compared to private land outside the focus area.

Henry Sever Conservation Area

Last summer, biologists evaluated habitat conditions for bobwhites on Henry Sever Conservation Area, a designated Quail Emphasis Area in the Northeast Region. Pictured is Darlene Bryant, wildlife management biologist, evaluating brooding cover in an idle food plot. Idle food plots provide ideal brooding cover for bobwhites and other wildlife. Over the past year, staff have been working to improve brooding cover and shrubby cover for bobwhites on this intensively managed area.



Green Hills District (Adair, Putnam, Schuyler, Sullivan Counties)

Wildlife Division staff completed a variety of habitat manipulations directed at improving quail habitat throughout the district. Locust Creek and Union Ridge Conservation Areas were the primary recipients of these activities, but all conservation areas have some level of quail management applied during the year. These manipulations include 2,500 acres of prescribed fire, 1,500 acres of leased farming operations, 900 acres of timber stand improvement to open up woodland stands, 40 acres of grassland conversion, 300 acres of food plots, 250 acres of old field management, and over 7 acres of edge feathering.



During 2008, substantial progress was made in the management of grassland bird habitat in the Mystic Plains Conservation Opportunity Area in southwest Adair County and southeast Sullivan County. **This “progress” was impressive in the quality of habitat managed and the display of** landowner participation and hard work. One of the major goals of the Greater Prairie Chicken Recovery Plan is to establish a 2,000 acre core area of management to have a positive impact on grassland birds, especially the greater prairie chicken. In 2008, private land conservationist John Murphy assisted several neighbors in the Mystic Conservation Opportunity Area whose properties totaled over 2,700 acres. This assistance included management plans, burn plans, demonstration burns, and cost share assistance to enhance habitat. Although not every acre is under management and these landowners have not accomplished everything they set out to do, broad inroads have been started to have a positive resource impact on a landscape scale.

Two of the biggest factors to any success in the Mystic Conservation Opportunity Area have been 1) functioning partnerships and 2) showcase properties. Currently, the Missouri Prairie Foundation, the Missouri Department of Conservation, and the United States Fish and Wildlife Service have been proactively working with landowners to provide technical and financial assistance. These partnerships allow flexibility in the delivery of programs, outreach, and public support.



Restored habitat after a prescribed burn on the Klingsmith property.

Certain projects garnered much attention, especially with local landowners. The highest profile project was prairie restoration and woody cover control on the two neighbors, Joshua Shoop and Kevin Carpenter. These adjoining properties totaled approximately 230 acres of heavily grazed pasture and hay ground. Through MPF salesmanship, MDC technical advice, and funds from a variety of state & federal funds, over one half mile of mature fence line was removed, 58 acres of encroaching locust and cedar removed, and 75 acres of extremely rich prairie was burned. The buzz of activity around these two properties has been a productive segue into technical plans and positive relationships with other neighbors, who, in turn, are starting to implement practices on their own land. Considering that the Mystic Conservation Opportunity Area is in 100% private ownership, it will take a surge of positive landowner experiences like these to make a real difference on the landscape. Up to this point, avian response has been anecdotal, but reports of increased numbers of bobolink and dickcissel will surely continue as we progress into another nesting season.

Mark Twain District (Marion, Monroe, Pike and Ralls County)

In the Mark Twain District (as in the rest of the state), 2008 saw the end of a very successful Conservation Reserve Enhancement Program (CREP). Monroe County enrollment in this native grass conservation program reached over 2,900 acres including 850 acres of CP-33 field borders. With an estimated average width of 40 ft, this translates to 175 miles of quail friendly borders established within Monroe County. Besides the native grasses established through this program, over 40 acres of woody cover were also established through shrub planting, downed tree structures and edge feathering. During this flurry of activity, private land conservationist James Ebbesmeyer worked closely with cooperators and the local USDA and SWCD offices on wildlife planning and timely advice.

Landowners in the Mark Twain District also benefited from a strong Quail Unlimited presence in the form of the Mark Twain QU Chapter. Members and non-members of this group took advantage of over \$10,000 in MDC and Mark Twain Quail Unlimited cost share funds to implement quail friendly habitat practices on their property, including: prescribed burning, edge feathering, fescue eradication, food plots and native warm season grass planting. A joint MDC and QU seed day was held in April, resulting in over



A CP-33 field border in Monroe County provides nesting habitat for bobwhites, pheasants and wild turkey.



600 acres of food plot seed being bagged and distributed to over 150 landowners. The Mark Twain Quail Unlimited Chapter along with a NWTf Superfund grant resulted in a new ready to go management unit for private landowners. The unit, which contains all the equipment to burn, spray, and seed, is available for rent to those landowners who want to improve quail habitat on their property but do not have the proper equipment.



Outreach and Education programs about quail and quail habitat management took place during several events held in the district during 2008. Youth were reached through the United States Corps of Engineers Environmental Education Day and a Day with Wildlife. Adults were targeted at events such as the KRES Lifestyle Fair, Evening with Wildlife, Daughters of the American Revolution program and the **"Fall into Paris" event**. Habitat management articles were also published in the Soil and Water Conservation District newsletter. In addition, prescribed burn training was held for the local fire departments to help them better understand how prescribed burning can be completed safely and how it can be beneficial for wildlife habitat development.

Activities in the Paris Quail Focus Area included shrub plantings, edge feathering, fescue eradication, prescribed burning and strip disking. A meeting was held with the Missouri Department of Transportation and the Monroe County Commission in regards to establishing a quail friendly shrub/native grass planting on state right of way at the northeast corner of the focus area. The third and fourth **editions of "IN FOCUS", the Paris Focus Area newsletter, were published** in 2008. Summer cock call and fall whistle count surveys continued to be conducted both within and outside of the focus area to determine the effectiveness of concentrated habitat work on several farms.

Pike county landowner, Mark Buehrle, utilized Quail Habitat Initiative cost share to restore habitat on his farm. This cost share was made possible by a cooperative agreement between Quail Unlimited and the Department of Conservation. With technical assistance from private land conservationist Tim Brooks, Mark established 49 acres of field borders on his farm. As a result, his quail population increased from 2 coveys to 17 coveys in 2 years. Although Mark is not within a quail focus area, his efforts demonstrate the interest of landowners and Private Land Services **Divisions'** dedication to promoting good quail habitat throughout the Northeast Region.



NORTHWEST REGION

Public Land Accomplishments

Nodaway District Conservation Areas (Atchison, Holt and Nodaway County)

In the Nodaway District, biologists planted 55,000 shrubs (wild plum, blackberry, dogwood, hazelnut, and ninebark) which created approximately 18,000 feet of edge habitat. Four hundred acres of food plots were planted and 250 acres were disked or treated with herbicide to set back smooth brome and late successional broadleaves. Two hundred acres of unharvested crop strips were overseeded with desirable legumes that will be left idle the following year. These totals do not include management where overall grassland management was the focus, but areas where quail and pheasants were emphasized.

Upper Grand River District Conservation Areas (Gentry, Harrison and Worth County)

Seat Memorial Conservation Area – In 2008, one mile of woodland edges and woody draws were edge feathered, nine miles of field edges were disked and either seeded to annual grain or left fallow, 300 acres of native grass and old fields were strip disked, 232 acres of grasslands and old fields were sprayed for fescue, 84 acres of woodlands were thinned via hack and squirt and 100 acres of old field were burned. Winter and spring weather hampered burning, but a few late spring and summer burns were completed. As a designated Quail Emphasis Area in Worth and Gentry County, staff are monitoring quail and songbird densities on the conservation area.

Grand River Grassland Conservation Opportunity Area – In 2008, 230 acres of native prairie were burned and spayed for cool-season grass invasion and sericea lespedeza control on Pawnee Prairie Natural Area in Harrison County. Approximately 100 acres was harvested for native wildflower seed. In March 2008, 415 acres on The Nature Conservancy's Dunn Ranch was seeded with native wildflowers and grasses harvested in 2007.

In all, 500 acres of grasslands and old fields were burned, 1-¼ miles of edge feathering occurred, nearly 10 miles of field edges were disked and seeded to annual grain or left fallow, 250 acres of grasslands and old fields were sprayed for fescue, 300 acres were strip disked, 84 acres of woodlands were thinned using hack and squirt and 165 acres of old field renovation using chainsaws and a bull hog was accomplished on public land.



St. Joseph District Conservation Areas (Andrew and Buchanan County)

During 2008, wet conditions delayed early spring burns and other spring disturbances at Happy Holler Conservation Area, a designated Quail Emphasis Area in central Andrew County. Fall covey counts were a little better than 2007 season. Despite the wet conditions 60 acres of food plots were completed. During 2008 over 17,096 linear feet of edge was developed or enhanced on the area. Timber stand improvement accomplishments included 30 acres of thinning and 50 acres of post timber sale treatments. We conducted 210 acres of prescribed burning, and an additional 80 acres of mowing/disking disturbance. Approximately 25 acres of cool-season grass was converted to a native grass and wildflower mixture. Old field accomplishments included: 30 acres of woody removal and 20 acres of sericea lespedeza treated.

Lower Grand River District Conservation Areas

Located in northern Livingston County is the Poosey Conservation Area. As a designated Quail Emphasis Area, management continues to focus on providing brood rearing and woody/shrubby cover for bobwhite quail and grassland birds. Habitat work completed by Phil Sneed, Rick Falconer and Matt McDonald was directed towards setting back succession with prescribed burning (128 acres), strip spraying (15 acres) and strip disking (38 acres) in old fields and grasslands, controlling invasive species (89 acres) and creating or enhancing potential covey headquarters (4,200 linear feet of edge was completed with an additional 18,600 feet under contract). In addition, the work team participated in the field appraisal this summer on the area. The purchase this fall of a 3-point boomless sprayer will increase staffs ability to spray invasive plants such as tall fescue and sericea lespedeza in 2009.

Missouri River District Conservation Areas

Bunch Hollow Conservation Area is a 3,200 acre Quail Emphasis Area within the 2C Quail Focus area in northern Carroll County. During 2008, the work team experienced very wet conditions throughout the growing season. Quail numbers for the spring whistle counts remained similar to 2007. However, staff noticed higher numbers of broods during the summer and late fall. Fall covey survey counts were higher than 2007 and the surveyors flushed 14 coveys during the two days of

monitoring, with an average covey size of 12.8 birds. Despite wet conditions in the field this year, the crew was still able to plant approximately 70 acres of food plots and overseed 165 acres of legumes. District staff sprayed 115 acres of sericea lespedeza and 35 acres of fescue along field edges and man-made covey headquarters. Approximately 25 acres of old field was treated for woody encroachment by mowing and spraying. During 2008, staff enhanced approximately 34,848 linear feet of edge on Bunch Hollow Conservation Area through edge feathering.



Shown in the picture, fescue and brome must be sprayed prior to edge feathering woody draws and hedgerows.

Pony Express District Conservation Areas

A big push on the Bonanza Conservation Area in Caldwell County (a Quail Emphasis Area) is to eliminate smooth brome and fescue from the 1,871 acre conservation area. With the use of dozing and spraying, the work team was able to prepare 170 acres for conversion to wildlife friendly grass mixes. By the fall of 2008, staff had successfully treated most of the unwanted brome and fescue infested fields. Only a few isolated patches, less than five acres, still remain. Another project this coming spring will be to introduce prescribed fire to new areas identified as unusable space. These areas are mostly woodland with little understory to protect quail and provide food.



Wildlife management biologist Dennis Browning in a field of partridge pea during the Bonanza Field Appraisal.

The past year monitoring on Bonanza Conservation Area included the spring songbird survey in June and fall whistle counts in October. The entire work team also participated in a field appraisal of the conservation area in July. The most often repeated recommendation from the field appraisal was a lack of soil disturbance that would provide brood rearing cover. Strip disking is a much needed practice that can be implemented on any area interested in improving quail habitat.

Overall habitat practices on state land in the Pony Express District (**Clinton, Caldwell, Daviess and DeKalb** Counties) totaled 298 acres of food plots, 217 acres of legumes overseeded in crop fields for brood rearing cover, 150 acres of light dozing to improve field conditions for spraying and reclaim dense woody stands, 41,537 linear feet of edge enhancement, 368 acres sprayed to eliminate invasive weeds such as sericea lespedeza, smooth brome and fescue, plus 45 acres of prescribed fire on old fields.



Private Land Accomplishments

St. Joseph District –Covey Headquarters Focus Area

The district conducted the 6th Annual Covey Headquarters Landowner Tour in Andrew County. The event featured a fall whistle count survey and a landowner farm tour focusing on CRP mid contract management practices including a fall demonstration prescribed burn of warm season grasses. Other outreach efforts consisted of district staff hosting the MDC booth at the annual Saint Joseph Farm and Ag Show, distributing over 8,000 lbs. of food plot seed to 200 cooperators through the Missouri seed program, and participating in a farm tour for University of Missouri School of Agriculture – Journalism students to interview landowners who are enhancing production and habitat through Farm Bill programs.



Participants listen to a presentation at the 6th Annual Covey Headquarters Landowner Tour.

Heartland Chapter Quail Unlimited remains a valued partner

The Heartland Chapter of Quail Unlimited continues to be an active and valued partner with quail and grassland bird recovery efforts in the Saint Joseph District. The district is currently participating in a private land managed CRP quail monitoring project in Andrew County that is financially sponsored by the Heartland Chapter. The purpose of the project is to document the use of macro habitats created by CRP mid-contract management practices. This project is a collaborative effort between MDC, Heartland Chapter QU, and Missouri Western State University biology faculty and students. The Heartland Chapter also conducted their annual youth day to introduce local youth to shooting sports including archery, shot gun shooting, hunter safety, and an opportunity for wing shooting with the use of dogs.



Heartland Quail Unlimited Chapter members receive top honors

A big highlight of 2008 was two members of the Heartland Chapter of Quail Unlimited receiving the prestigious Budweiser Adopt-A-Covey Landowner of the Year Award. Heartland QU members, Jay Shewmaker and David Webber, were recognized for quail management efforts on their properties as well as their contribution to the education of others on upland wildlife management and quail biology through their local chapter. Jay and Dave received two of only eight regional awards given out nationally which is a testament to the tireless dedication and efforts of Heartland Chapter members to conservation. Lastly, Dave Webber also won the National QU Landowner Award. In Dave's own words, "Due to the continued effort of the Saint Joseph District, this accomplishment would have not been possible."

Missouri River and Pony Express Districts

Carroll County (2C Quail Focus Area)

Very wet conditions challenged efforts; however, several CRP-BOB cost share practices were completed this spring. In all, 21 cooperators completed 772 acres of prescribed burning, 52.6 acres food plots, 3.5 acres or 5082 linear feet of edge feathering, and 25 acres of sericea lespedeza eradication. The United States Fish and Wildlife Service Partners Program provided cost share to landowners for 27.5 acre savanna restoration and a 30 acre prairie restoration project by using herbicides to eradicate cool-season grass invasion along with prescribed burning to promote native grasses and wildflowers. MDC cost share projects included 271 acres of sericea lespedeza eradication, 40.1 acres woody invasion control, and 6.5 acres native warm-season grass establishment. Over 900 acres of quail friendly CRP practices, such as CP-21, 15B, 30, 29, 33 and 38E have been enrolled in the focus area.



Caldwell County (2C Quail Focus Area)

The future looks bright for quail habitat in the Caldwell County portion of the 2C Quail Focus Area. There were 16 acres of edge feathering or approximately 23,000 feet of edge created last year. Eighteen downed tree structures were constructed that were 30 feet by 50 feet in size, which total 0.6 acres. Over 31,000 feet of woody edge was treated with herbicide to eliminate cool-season grass understory. There were over 31 acres of fescue converted to a quail friendly mix of little blue stem, side oats gramma, and native wildflowers. There were also 16 acres of crown vetch and 12 acres of sericea lespedeza eradicated. We also wrote plans to construct 79 downed tree structures, 2.25 acres of edge feathering, 7.2 acres of warm-season grass conversion, and 0.6 acres of woody edge treatment with herbicide which should be completed by June 2009.

New Quail Forever Chapter Complements 2C Quail Focus Area

A new Quail Forever Chapter was chartered in Carroll County. The 2C Quail Forever chapter's first fund raising banquet was a resounding success with over 200 in attendance. Funds raised will be used to complement 2C Focus Area outreach efforts and habitat projects.

Daviess County

CP-38 has taken off in Daviess County with over 1,000 acres **enrolled...and folks are still** coming in to sign-up for the program. Many of the producers showing interest were renewing old CRP contracts. This should result in a lot of fescue and brome being converted over to little blue stem, side oats gramma, and native forbs. The higher soil rental rates seem to appeal to most producers. Most individuals are going with the downed tree structures and the maximum 20% food plots.

Given the current contracts, 320 downed tree structures will be installed which, at 30 feet by 50 feet in size, will total about



Worth Yost of Pattonsburg proudly showing off a downed tree structure and milo food plots along the edge of his woods and CRP. Mr. Yost is 78 years young and he's still able to get out and create quality quail habitat on his own.

11 acres and 1,155 shrubs will be planted to create about 15 covey headquarters. A producer successfully applied for the federal WHIP program which will result in the construction of 30 downed tree structures, planting 2,425 shrubs (grey dogwood, wild plum, hazelnut, and blackberry) for covey headquarters, 38.1 acres of native warm-season grass conversion (little blue stem, side oats gramma, alfalfa, and native forbs). Eleven acres of fescue were converted to native warm-season grass with MDC cost share funds, 16.9 acres of fescue over to native warm-season grass with CP29 funds, and 153 acres of sericea lespedeza were treated with CRP-BOB cost share.

Clinton County

Interest in quail and grassland bird management is growing in Clinton County. Using MDC cost share, 12.8 acres of fescue were converted to wildlife friendly grasses, 10 downed tree structures were constructed, and approximately 3,000 feet of woody edge habitat was sprayed with herbicide.



Strip disking a CRP field with a roller chopper to improve brooding cover for bobwhites.

Nodaway River District

CP-38 proved a very popular practice in Atchison, Holt and Nodaway Counties in 2008. Approximately 1,300 acres of CP-38 were enrolled in the district this year. Several more contracts are being processed as of press time. Approximately 6 acres of edge feathering and 20 acres of fescue conversion were attained through Pheasant Forever/MDC cost share. Also, various CCRP practices such as CP-33 and CP-29 were also enrolled in the district, though not as many as in past years.



A landowner spraying tall fescue

Lower Grand River District - Poosey Quail Focus Area

District staff was heavily engaged with outreach and education events within the Poosey Quail Focus Area and surrounding farmland in northern Livingston County. Outreach events consisted of a cooperative effort with the Livingston County Quail Forever Chapter to host a landowner workshop focusing on conservation elements of Farm Bill programs that benefit quail; hosting a quail management workshop and tour for the Chillicothe FFA Natural Resources class at the Poosey Conservation Area; conducting a prescribed burn workshop and fall whistle count workshop at the Poosey Conservation Area; featuring a display of focus area landowner accomplishments at the annual Quail Forever banquet; distribution of Poosey Quail Focus Area signs and calendars to local cooperators; submitting articles for the Livingston County SWCD newsletter, the Chillicothe Constitution Tribune spring and fall Outdoor Editions; and providing several local radio programs on CP-33, CREP, CRP SAFE, CRP management, and food plots.

Ten management plans were developed on private land within the Poosey Focus Area in 2008. They included 165 acres of timber stand improvement (TSI), 22 acres of CRP management and several acres of edge enhancement and food plots. Habitat practices implemented within the focus area in 2008 included 52 acres of CRP SAFE, 42 acres of native prairie restoration through the Fish and Wildlife Service Partners Program, 100 acres of TSI through the federal WHIP program, 10 acres of sericea lespedeza eradication, 3 acres of edge feathering, 2 acres of edge spraying, 13.5 acres of cool-season grass conversion, 122 acres of prescribed fire on CRP, and 10 acres of prescribed fire on old fields. Lower Grand River District-Wide Quail Friendly Summary: In Grundy County 773 acres enrolled into CREP, 100 acres enrolled into CP-33 and 87 acres enrolled into CP-38. In Livingston County, 214 acres enrolled into CP-33, 252 acres enrolled into CP-38 and four new federal WHIP contracts.



Upper Grand District and Grand River Grasslands Conservation Opportunity Area

Much progress was made within the Grand River Grassland Conservation Opportunity Area (Harrison County) in 2008. Outreach & Education efforts this year included a field trip which consisted of tour stations highlighting native warm-season grass conversion, CRP management and native grass seed harvesting techniques. A United States Fish and Wildlife Service grant has been fully allocated with 12 landowners to receive \$45,000.00 in cost share funds to install habitat improvement practices.



Projects are approximately 80% completed. Using Department of Conservation cost share, \$14,000 were allocated to 10 landowners to complete various habitat improvement practices. Tree removal and native grass conversion seem to be the practices that are gaining momentum. Several WHIP and EQIP contracts will eventually lead to 500 acres of native grass conversion and approximately 100 acres of woody cover control in the near future. Lastly, approximately \$20,000 was added to an existing WHIP contract through the McPheeter Grant for prairie chicken and grassland bird habitat establishment. In Mercer County 438 acres was enrolled into CREP, 460 acres into CP-33, 483 acres in CP-38 and two new federal WHIP contracts were initiated.

Linn and Chariton County

In Linn and Chariton Counties Department staff were involved in numerous activities related to quail habitat management on private land. In 2008, Department staff and conservation partners distributed over 12,000 pounds of food plot seed to landowners. Through the Quail Unlimited Quail Habitat Initiative, over \$3,000 in cost share was allocated to habitat projects, but due to extremely wet conditions only a few of the projects have been completed to date.

Department biologists have worked with landowners to develop plans for several new WHIP and EQIP contracts that involve habitat improvements for quail. In Linn and Chariton Counties two new WHIP contracts will involve 40 acres of native warm-season grass and wildflower establishment, 95 acres of prescribed burning, 23 acres of old field renovation by removing unwanted trees, 7 acres of edge feathering and 14 downed tree structures. One new EQIP contract in Linn County includes 22 acres of native warm-season grass and wildflower establishment, 22 acres of prescribed burning, 4 acres of old field renovation, 175 acres of timber stand improvement for wildlife and 0.4 acres edge feathering. Both CP-33 and CP-38 continue to be popular practices in Linn and Chariton Counties. A total of 6 new CP-33 and CP-38 contracts were enrolled into these conservation programs in 2008.



OZARK REGION

Landowner and Quail Focus Area Field Day Highlights Management at White River Trace Conservation Area

In October 2008, the Rolla District Team and the Ozark Hills Quail Forever Chapter sent invitations to all landowners in the White River Trace Quail Focus Area located in Phelps and Dent County for a quail habitat field day. The workshop was held at the White River Trace Conservation Area, a designated Quail Emphasis Area in Dent County. During the workshop, Department biologists provided landowners with plenty of habitat tips they could take home and apply on their farms.



During the workshop, landowners saw recent examples of strip disking, woodland thinning, prescribed burning and covey headquarters plantings on the White River Trace Conservation Area. Department staff were on hand to show landowners how to properly complete various practices; however, the demonstration with a bullhog and tree shear were by far the biggest hits of the day. Both pieces of equipment are used on public land to cut down trees in old fields and grasslands to improve habitat conditions for northern bobwhite, cottontail rabbit and other wildlife. Over the past year, Department staff have been working to control large colonies of oak and hickory sprouts in old fields and grasslands on the White River Trace Conservation Area. Staff have become rather innovative and are even using weed-eaters with brush blades to cut some of the smaller trees. On other parts of the conservation area, staff are working to restore degraded woodlands such as the one pictured below.

Landowners enjoyed being able to ask a variety of questions to Sarah Egly (private land conservationist), Justin Gailey (wildlife management biologist), and Brian Hall (resource forester). The next event planned for the landowners in the White River Trace private land Quail Focus Area is a **Woman's Upland Bird Hunt** for 20 women and young ladies who will be able to see and enjoy the results of habitat management first hand on a private farm in the focus area.



Despite the wet weather in 2008, Department staff were still able to complete a few landscape level woodland prescribed burns on public land, often treating several hundred or even thousands of acres at a time. The Department of Conservation often partners with other state and federal land management agencies when conducting landscape level prescribed burns. At a smaller scale, Wildlife Division staff were also able to meet their annual goal of burning over one-third of Cover Prairie Conservation Area, a designated Quail Emphasis Area in Howell County. This aggressive goal has helped maintain excellent habitat conditions for bobwhites on this conservation area.

Community Involvement Key to Howell County Quail Focus Area

The Howell County Quail Focus Area, just south of West Plains, received a boost this past year by coordinating the formation of a citizen run Quail Forever Chapter. Private land conservationist Brad McKee feels conservation partners and active members and landowners are a great asset to the Department and essential for the quail focus area to succeed. Members of the local Quail Forever Chapter helped raise cost share money for the organization and assisted with field days and outreach efforts in the focus area.



Landowners in the focus area have placed a priority on improving habitat for bobwhites and recruiting youth into the outdoors. Since the formation of the chapter in August, two field days have been held in the focus area to provide critical information on bobwhite habitat management and to attract other landowners in the focus area. The first workshop included fall whistle count training for private landowners. The training was provided by resource scientist Beth Cole and Elsa Gallagher with Quail Forever. The remainder of the field day was spent touring native grass plantings and woody cover plots on Lynn Henry's property and open woodland management on the Travis Morrison property. **The second field day was on Chuck Morgan's property where participants were shown open woodland management along with early successional practices and native grasses in their early stages of development.** Both workshops were well attended by landowners within the focus area.

The future looks bright for the Howell County Quail Focus Area. Chapter events and quail habitat messages have been strongly supported by the local media. Events planned in the near future include a youth quail hunt and of course a fundraising banquet.



A restored pine/oak woodland in the Ozark Region.

SAINT LOUIS REGION

Cuivre River Wildlife Management Association Forms in Lincoln County

The first meeting of the Cuivre River Wildlife Management Association was held on October 23, 2008 in Lincoln County. The meeting was attended by approximately 85 area landowners and hunters, who approved their bylaws and elected their board of directors and officers. Private land conservationist Jeff Esely and private landowners within the association coordinated the event.



The association is a cooperative effort of landowners, hunters and wildlife conservationists working to improve wildlife populations and quality hunting opportunities on the landscape, and their initial target area is the 32,000-acre quail focus area in western Lincoln County near the communities of Hawk Point and Truxton. The group was organized with the following goals in mind:

- 1) To enhance the white-tailed deer herd quality on the landscape through the protection of fawn and yearling bucks and adequate harvests of does.
- 2) To enhance wildlife populations on the landscape through the promotion of habitat management, with early successional species such as bobwhite quail being a high priority.
- 3) To recruit youths into hunting who are safe, ethical and knowledgeable about wildlife conservation principles.

Thus far, the owners or hunters of approximately 35% of the target area have expressed interest in joining the association. This is very promising since the success of the association in achieving their goals will depend largely on the amount of participation it receives in the area.

William White Conservation Area

At the William White Conservation Area in Lincoln County, a designated Quail Emphasis, biologists have been busy eradicating tall fescue and setting back unwanted woody vegetation. By the summer of 2008, most of the area was free of tall fescue and smooth brome with only small scattered patches still remaining on the area. Staff are also improving shrubby cover by planting native shrubs and edge feathering. The work team is even placing covey headquarters (see picture) in the middle of sunflower fields to provide woody cover for quail and perches for doves.



SOUTHEAST REGION

District Staff Work to Improve Maintz Wildlife Preserve

In 2008, management on the Maintz Wildlife Preserve, a Quail Emphasis Area in Cape Girardeau County, focused on improving brood rearing habitat by disking over 100 acres of grassland and old fields this last fall. Many of these fields were burned during the summer to reduce warm-season grass density. The combination of burning and disking is more effective at setting back rank grass stands and unwanted woody vegetation.



After three years of intensive management on the area, rabbit hunting continues to improve as hunter surveys have shown rabbit numbers have more than doubled. Spring bird surveys and fall covey counts show quail numbers on the area to also be increasing. As a result, hunter surveys are showing an increase in the numbers of coveys flushed by hunters over the past three years.

Southeast Regional Staff Leave Their Mark on Crowleys Ridge Conservation Area

In 2008, summer prescribed fire was used to regain control of overgrown old fields at Crowleys Ridge Conservation Area in Stoddard County. Despite a wet summer, over 350 acres of the area was burned this past summer and fall. Southeast Region staff helped out on the burns as crews from Piedmont, Benton, New Madrid, East Prairie, Perryville, and Cape Girardeau were all involved. In addition old fields and grassland were strip disked and sprayed to improve brood rearing habitat, while over 25 acres of edge feathering was completed. Due to some comments from hunters last year about the inaccessibility of some fields, staff tried to improve access by strip disking larger fields to improve access. This has seemed to help hunters as rabbit harvest is up and hunters encountered on the area are quick to comment on the more hunter friendly fields. In late 2008, Matt Bowyer, wildlife management biologist, worked with a local newspaper to write an article about the intensive habitat management occurring on the conservation area. The purpose of the article was to inform hunters and visitors who might be caught off guard by the significant amount of disturbance that has occurred in recent years.



An NWTF Superfund Grant helped the Southeast Region purchase a UTV to assist with prescribed burning and invasive plant control on the region's two Quail Emphasis Areas.

Private Land Success Stories Stoddard County

Private land conservationist, Dave Wissehr recently had a conversation with one of his dedicated Stoddard County landowners. Dave has been working with Tom the past three years to improve quail habitat on his 120 acre farm by modifying the existing CRP contract to allow for additional management. As a result, Tom has been able to conduct summer and fall prescribed burns and strip disking on the rank warm-season grass stands to improve brooding cover. In addition, Tom received MDC cost share to revitalize a 10 acre old field that is now managed with strip disking and rotating food plots. Dave has also worked with Tom to improve shrubby cover around the old field and CRP grassland by edge feathering fencerows and timbered edges. Tom does not own bird dogs so therefore has not "sampled" his managed quail population until late this past season. However, a good friend of Tom with a bird dog offered to help. In one afternoon hunt they located three coveys, two of which had over 20 birds. All three coveys were only a short distance from the edge feathering, with one in the renovated old field, one in the CRP grass field and the other along a crop field.

Private Land Success Stories Cape Girardeau and Scott County

Private land conservationist Larry Heggeman is still receiving landowner success stories from both Cape Girardeau and Scott County. In 2008, Scott County was recognized as the first county in the nation to achieve goals identified in the NBCI. Currently Larry is working with landowners in the Oak Ridge and Gordonville Quail Focus Areas (Cape Girardeau County) and Scott County Quail Focus Area. Larry has high hopes for both counties and quail focus areas as a result of the new CP-38 SAFE practice.



“Quail numbers on my farm have been phenomenal since I started to conduct summer burns and my shrub plantings have matured to provide better cover. Three hunters located over a 100 quail in less than two hours this fall. Best they’ve ever done! My six year old granddaughter loves seeing them too and gets quite a thrill when we encounter them during our hikes. The last time we were out she walked into a covey which flushed all around her and after her initial moment of fright exclaimed, AWESOME!”

David Schwab, Cape Girardeau County

“After hearing all the good reports of farmers seeing quail during the harvest last year in Scott County we were concerned that nobody was commenting on the number of birds this year. After talking with several farmers they said bird numbers were as good if not better than last year, it’s just that in the last few years seeing quail has become so common that it’s not “news” anymore!”

Scott County NRCS staff

“My brother Tom and I own the 250 acre farm we grew up on and have enrolled most of it in CRP. We recently converted most of the cool season grasses to warm season because it was not providing very good quail habitat. After finishing an extensive edge feathering project last winter we were amazed to find 10 coveys using the farm early in the fall. Recent October covey counts revealed 5 coveys heard from one monitoring point with an average of 16 birds per covey.”

Jim Wills, Cape Girardeau County

**Private Land Success Stories
Sainte Genevieve County**

Sainte Genevieve is not the first place in Missouri that comes to mind as a quail hunting hot spot. But anyone there over 40 who hunts will tell you how good it used to be.

So where have the quail gone? Landowners and hunters will bring up the usual suspects, but we have proof that if you create the right habitat, quail will thrive.

Ashley Williams manages a 400 acre family farm, mostly wooded hills, with only 80 acres in open land. Yet, Ashley gladly recalls hunts when multiple coveys would

be flushed in a given day. When he took over as manager, only one meager covey was left, and those birds migrated between his farm and the neighbors. His interest in quail led him to MDC staff who happily laid out a plan to restore quail habitat using CP-33. In the spring of 2005, Ashley was busy planting the edges of fields to native grasses and wildflowers, and creating brushy cover by edge feathering. In all, 19 acres of marginal cropland was enrolled into the program, the remainder is still farmed.

The first summer was disappointing. Serious drought made germination of native grasses difficult while weeds grew prolifically. But patience and care paid off. The native plants eventually filled in, and currently, four coveys of quail are thriving at the Williams farm. That favorite pastime called quail hunting has returned and as a huge bonus, rabbits run from every brush pile. More importantly, Ashley feels a great sense of accomplishment knowing he has restored small game habitat to his farm. From a financial perspective, he reports that farm income is higher with CRP than with farming alone.



Ashley Williams enjoying his CP-33.

Private Land Success Stories

Mississippi, New Madrid and Pemiscot Counties

Success stories are popping up left and right in southeast Missouri since the passing of the Conservation Security Program (CSP) in 2004. Private land conservationist Tim Kavan has been receiving landowner success stories since he started working for the Department in April 2007. Many of the success stories are coming from landowners in Mississippi, New Madrid and Pemiscot Counties who are participating in CRP and CSP. Many of the landowners are ecstatic how quail coveys and the number of birds in a covey have increased as a result of recent habitat work. However, not many people have heard the following story.

Denver Wolford is a farmer in New Madrid County. He operates around 1,400 acres of farm ground in which 1,000 of those acres are enrolled in CSP. Through CSP, Denver has created over 39,000 linear feet of field border and leaves 30 acres of unharvested grain each year for wildlife!

The diversity of wildlife on Denver's farms is amazing. Last fall during a dove hunt

the hunting party flushed a covey of quail, and even harvested a white-winged dove! Later that year, Denver and his son enjoyed an incredible duck hunt after school when part of the unharvested grain was flooded. This summer, Tim Kavan reported seeing a brood of 20 pheasants in the native grass field border.

Game birds are not the only wildlife species benefiting from conservation efforts in southeast Missouri. Tim Kavan also reported seeing a scissor-tailed flycatcher in a CSP field border in Madrid County. "I have only seen scissor-tailed flycatchers in portions of Southwest Missouri. The bird even left his perch to display his spectacularly long tail and then promptly returned to his perch", reported Tim.



"I have left idle areas for turn rows, but not entire field borders. I am planning on leaving most of the field borders and unharvested grain that I have control of after the contract expires just because of the added benefit for wildlife."

Denver Wolford

SOUTHWEST REGION

Private Land Success Story Lawrence County

In 2008, private land conservationist Mark Hutchings worked with a Lawrence County landowner to improve habitat conditions for bobwhites. In the past, the landowner has completed habitat work for bobwhites and was interested in diversifying his property even more. By utilizing cost share from the Ozark Plateau Chapter of Quail Forever in Springfield, he was able to increase the amount of native grass and wildflower plantings on his farm. Mark is also working with the landowner to improve shrubby cover around the newly planted fields that now provide ideal nesting and brooding cover for bobwhites.



Throughout southwest Missouri, staff are working with landowners to restore habitat for bobwhites and grassland wildlife. In 2008, staff continued to concentrate outreach and landowner assistance in targeted landscapes such as the Spring River Quail Focus Area and Western Cherokee Grasslands and Golden Grassland Conservation Opportunity Area which cover significant parts of Barton, Dade, Jasper, Lawrence and Vernon County.

Newton County Neighbors Restore Habitat for Bobwhites

Two southwest Missouri landowners have always enjoyed seeing quail over the years, but quail numbers have been decreasing in this area. Of course, the land use has changed, but the bills still had to be paid. The one quail habitat type both landowners were willing to improve was the hedgerows that separated the two properties. Private land conservationist Mike Petersen helped **identify a site that wouldn't impact his** cattle operation. With **Mike's expertise and cost share from** the Joplin Quail Unlimited Chapter the landowner sprayed the tall fescue along the edge of the hedgerow, fenced off the area and then completed several sections of edge feathering as shown in the picture. The first landowner completed his project in December 2007.

It didn't take long for the neighbor to ask what was going on. **With Mike's** help the neighbor started a similar project with fescue eradication, fencing and edge feathering in December 2008. In the future both sides of the hedgerow will provide good cover for bobwhites. In fact, both landowners are now sharing a covey of quail, **something that hasn't been seen on** both farms for several years. In the future, both neighbors plan to disk behind the fence to maintain good brooding cover. They have also talked about planting food plots.



Newton County Quail Habitat Renovation

This Newton County landowner began working with Department staff on improving his quail habitat back in the early 1990's. This is a good example of how bobwhite quail management is a continual process. Due to a lack of time for maintenance and because he could not find the help, the woody sprouts became bigger in his grassy fields. Now jump to 2008. The landowner came to private land conservationist Mike Petersen for help and to get his quail plan back in order.



Today, quail habitat maintenance is never ending. Without any disturbance from prescribed fire or strip disking woody sprouts can take over your quail habitat in a few short years. To get a jump start on this problem, the landowner used MDC cost-share dollars to spray the oak sprouts and get them under control. The landowner then took advantage of NWTF and another cost share program to hire a contractor with a clipper and herbicide sprayer to clip the larger oaks. The picture shows a brush pile in the foreground with three more in the background. The brush piles will be left for protective cover for bobwhites. By controlling the woody vegetation it will allow more sunlight, thus increasing his native grasses and forbs. In the future, he will be able to control his woody vegetation with prescribed fire every two to three years.

Missouri Quail Forever Chapter promotes youth participation

Cheryl Riley, VP of Education with Quail Forever giving a “No Child Left Indoors Award” to Ozark Plateau Chapter of Quail Forever headquartered in Springfield. Accepting the award for the chapter is Kurt Kysar – other chapter members were at the Ozark Empire Fair, so Kurt accepted for them. They won this distinction being the largest youth membership chapter with over 70 Whistler members.



Hickory County Landowner Brings Bobs Back to Restored Savanna

Recently, private land conservationist Warren Valenti took some time to visit with Paul Rost, a landowner in Hickory County. A couple years ago, Warren worked with Paul to enroll part of his farm into the federal WHIP program to restore a savanna.



Last summer, Paul contacted Warren because he was worried his savanna restoration project was a failure. Warren thought he better take a look. Paul had spot sprayed sericea lespedeza and fescue last summer and fall, and did a follow-up control burn this spring. During the visit, Warren was amazed by the native plant response. Paul had big bluestem, little bluestem, Indian grass and a variety of native wildflowers in the savanna. There was rattlesnake master, purple coneflower, brown-eyed Susan's, leadplant, partridge pea, blazing stars, goat's rue, purple prairie clover, and native lespedezas everywhere. Warren spent a little time identifying plants with Paul to rebuild his confidence in the project, but the clincher was when they flushed a covey of about 20 quail from the savanna and another covey on a different part of the farm. Next year Paul plans to spot spray any new patches of sericea lespedeza, but none were found during the field visit. In the future Paul will maintain this restored savanna with prescribed fire. Warren has worked with Paul to divide the 17 acre savanna into three separate burn units that will be alternated from year to year.

Crowder District Continues Woodland Restoration Efforts

The Crowder District work team continues to focus on grasslands and woodland restoration on public land in the district which includes Talbot Conservation Area, a designated Quail Emphasis Area in Lawrence County. One major habitat accomplishment in the Crowder District was the use of a private contractor to complete 120 acres of mid-story thinning in an open woodland restoration project at Talbot Conservation Area.



In addition, wildlife management biologist Frank Loncarich worked with resource forester Rod Tucker to contract a 25 acre timber harvest as a part of a woodland restoration project on Talbot Conservation Area. The district work team followed up with a few days of chainsaw work to thin out undesirable mid-story trees in the harvested unit. The work team also completed numerous habitat improvement projects on other public land areas in the district. The district includes several grassland focus areas and the Spring River Quail Focus Area.



Prairie District Work Team Continues to Restore Prairie for Bobwhites and Grassland Wildlife

In 2008, staff completed several good habitat projects for bobwhites and grassland wildlife in the prairie district which includes Barton and Jasper Counties. Biologists Dave Darrow, Jim Schultz, Duane Lewis, Larmie Todd, Gary Banwart and Caleb Breaker spent a considerable amount of time the past fiscal year conducting prescribed burns, controlling invasive plants and tree removal in the Prairie District.

One project of note was the successful establishment of 67 acres (24 acres on Buffalo Wallow and 43 acres on Shawnee Trail Conservation Areas) of reconstructed prairie next to existing remnant prairie. A prairie reconstruction project begins three to four years before the site is ever seeded. To help reduce costs, biologists will lease fescue infested fields to a local farmer through the normal bidding process. The contract between the farmer and the Department is usually for two or three years, during which time the farmer plants row crops such as soybeans. At the end of the contract, the field is seeded during the winter with a high quality mix of native grasses and wildflowers (as shown in the picture to the right).

Biologists also work with native seed companies to formulate a very diverse native grass and wildflower mix. For example, this year's seeding had 11.3 pounds of native wildflowers to the acre compared to 1 to 3 pounds for most cost share programs. After the seeding the real work begins for Department staff. Over the next two years, staff will mow the newly seeded area to reduce weed competition. Eventually the reconstructed sites at Shawnee Trail Conservation Area in western Barton County will be included in larger patch burn grazing units which again will depend on another permittee farmer.



The moment of truth. An MFA fertilizer buggy spreading a native grass and wildflower mix on a conservation area.

Wildlife Division Staff “Wick” Away Unwanted Sumac

The Stockton work team of Kyle Hedges, Rick Rath, Renee Larson, Richard Gregg, Louis Kleeman and John Henry worked through the wet summer to improve old fields and woodland habitat around Stockton Lake, a designated Quail Emphasis Area. In addition to a Quail Emphasis Areas, the crew is responsible for several remnant prairies in Dade, Cedar and Polk Counties.

One notable accomplishment in 2008 was the use of a brush wick. The workteam used the wick to control excessively large stands of sumac on Stony Point Prairie and Stockton Lake Conservation Area in Dade County. Many of the areas were beyond mowing, yet the sumac was too small to use a dozer or tree shear. Additionally, broadcast spraying was not an option due to the high quality forbs underneath (especially on the prairie). Prescribed burning has been, and is still being utilized, but some of these areas are so **dense with sumac, there isn't** enough fuel to carry the fire. Besides, unless it can be burned multiple years in a row, we still have re-sprouting problems. In came the brush wick. Staff used a solution of Tordon 22K in the brush wick. In no time, 80 acres on Stony Point Prairie and another 135 acres on Stockton Lake were treated. A few thickets were flagged and left to provide covey headquarters. Based on the favorable results, the crew intends to reclaim many more acres in the future.



Habitat is the Key



Visit the following websites to learn more about quail and grassland bird conservation

<http://mdc.mo.gov/landown/wild/quail>

<http://mdc.mo.gov/hunt/gamebird>

<http://morequail.blogspot.com>